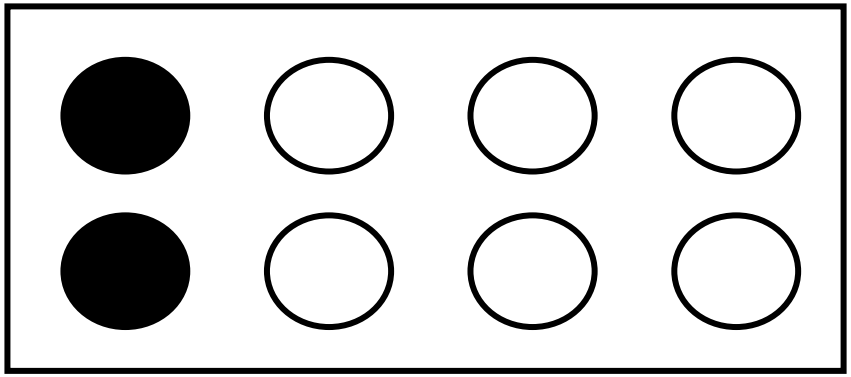
3.3.F - 3.3.G – Equivalent Fractions and Comparing Fractions
Problem Set: 1

1. C	**2.** C	**3.** B	**4.** A	**5.** C	**6.** C
7. B	**8.** C	**9.** D	**10.** A	**11.** A	**12.** C
13. B	**14.** B	**15.** B	**16.** B	**17.** D	**18.** D
19. A	**20.** B	**21.** B	**22.** C	**23.** B	**24.** D
25. D	**26.** C	**27.** D	**28.** D	**29.** D	**30.** B

1. Irene has a group of counters, as shown.



Which two fractions can represent the black counters in the group?

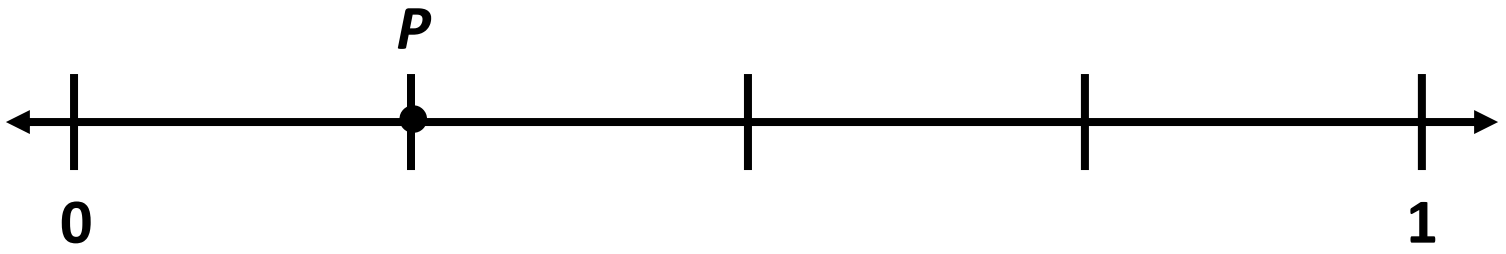
A. $\frac{2}{6}$ and $\frac{2}{8}$

B. $\frac{1}{3}$ and $\frac{2}{6}$

C. $\frac{1}{4}$ and $\frac{2}{8}$

D. $\frac{1}{4}$ and $\frac{2}{4}$

2. Point *P* on the number line represents two equivalent fractions.



Which two equivalent fractions can point *P* represent?

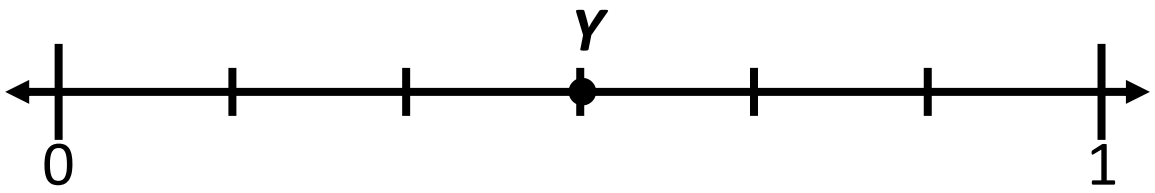
A. $\frac{1}{4}$ and $\frac{1}{8}$

B. $\frac{1}{3}$ and $\frac{2}{6}$

C. $\frac{1}{4}$ and $\frac{2}{8}$

D. $\frac{1}{4}$ and $\frac{3}{4}$

3. Point *Y* is labeled on the number line.



A. Point Y represents $\frac{3}{6}$ and $\frac{3}{4}$, because both fractions represent 3 equal parts of a whole.

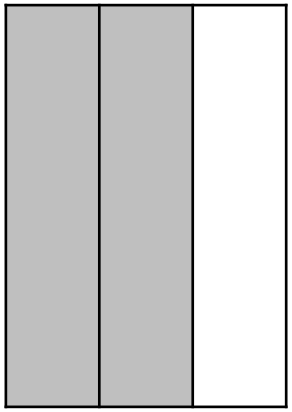
B. Point Y represents $\frac{3}{6}$ and $\frac{1}{2}$, because both fractions are exactly halfway between 0 and 1 on the number line.

C. Point Y represents $\frac{4}{6}$ and $\frac{3}{6}$, because both fractions represent 6 equal parts of a whole.

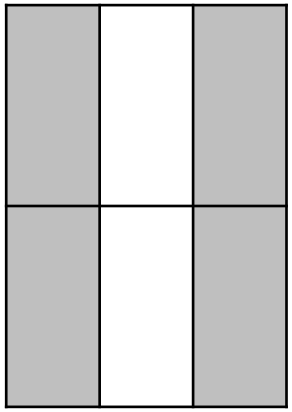
D. Point Y represents $\frac{4}{6}$ and $\frac{1}{2}$, because both fractions are exactly halfway between 0 and 1 on the number line.

4. Four fraction models are shown.

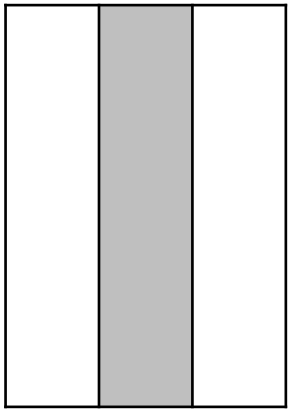
Model 1



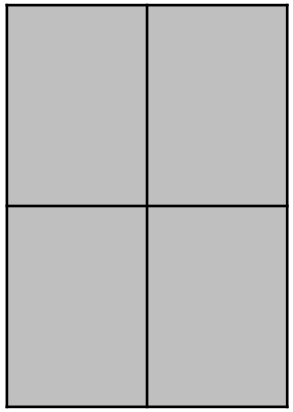
Model 2



Model 3



Model 4



Which two models are shaded to show equivalent fractions?

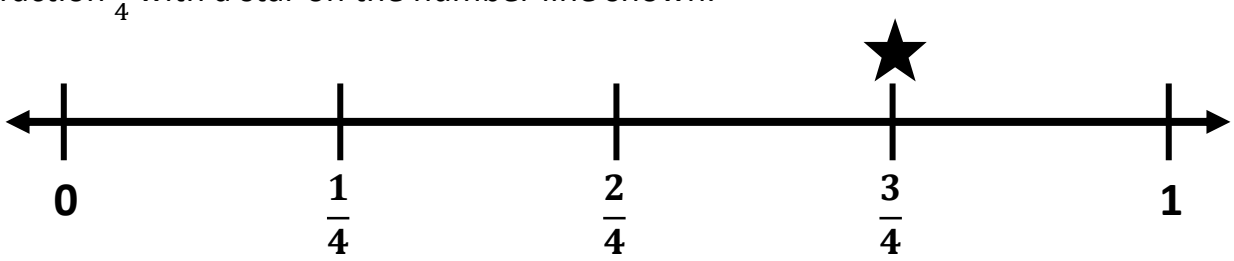
A. Models 1 and 2

B. Models 1 and 3

C. Models 2 and 4

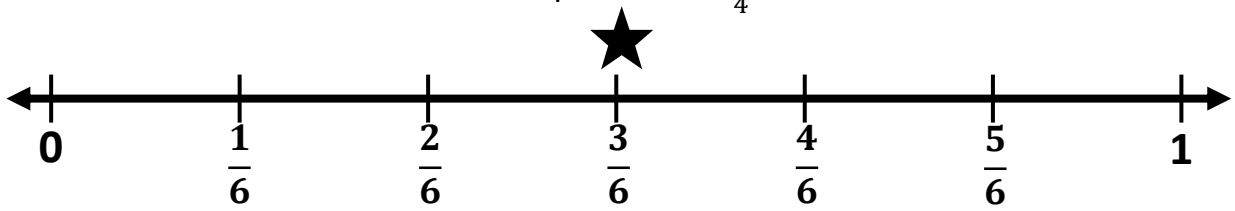
D. Models 2 and 3

5. Eddie marked the fraction $\frac{3}{4}$ with a star on the number line shown.

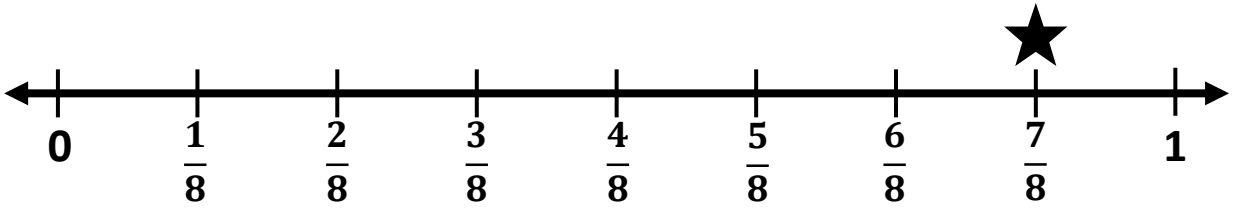


Which of these number lines shows a fraction equivalent to $\frac{3}{4}$ marked with a star?

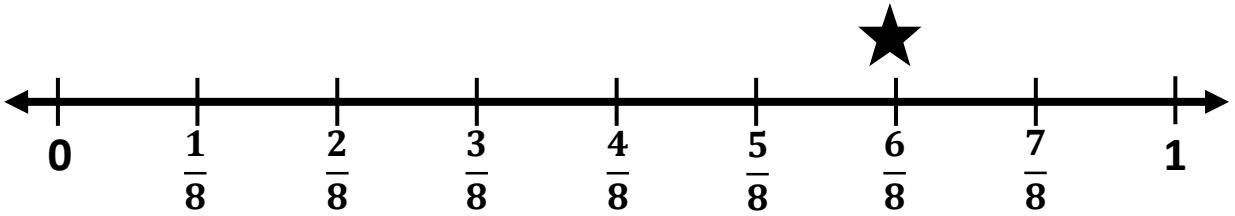
A.



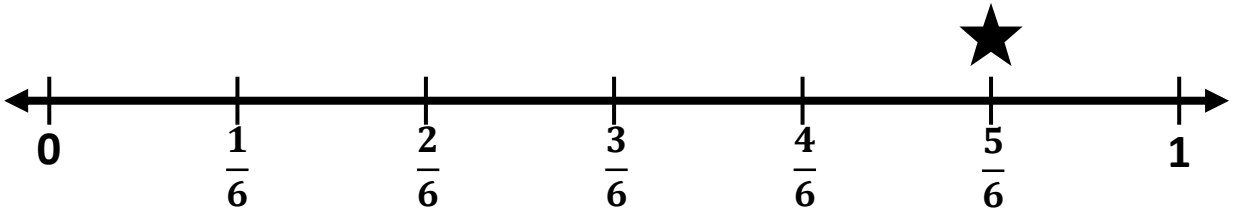
B.



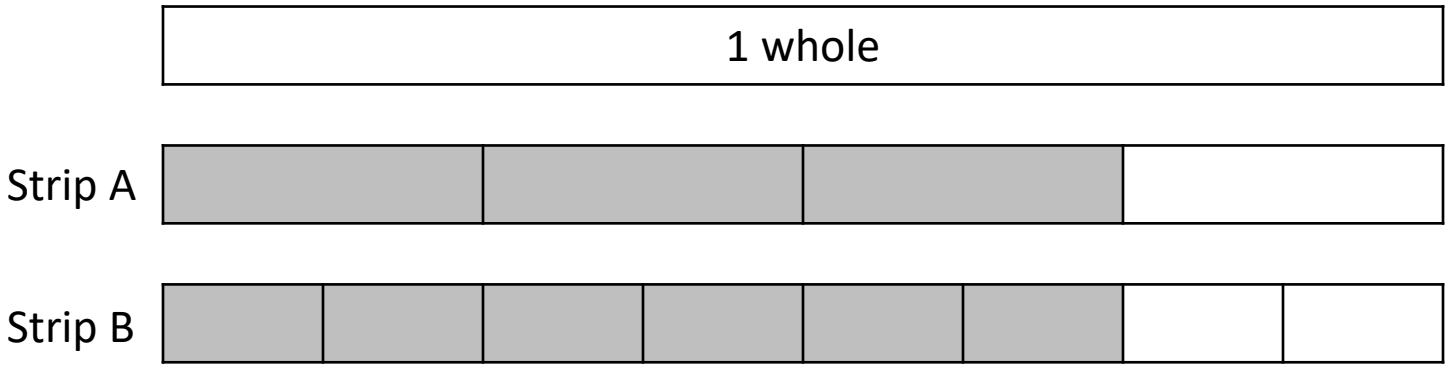
C.



D.



6. Each strip of the diagram is shaded to represent a fraction of 1 whole.



The fractions represented are –

A. equivalent, because the shaded area of Strip B is greater than the shaded area of Strip A

B. not equivalent, because Strip A has 4 parts in all, and Strip B has 8 parts in all

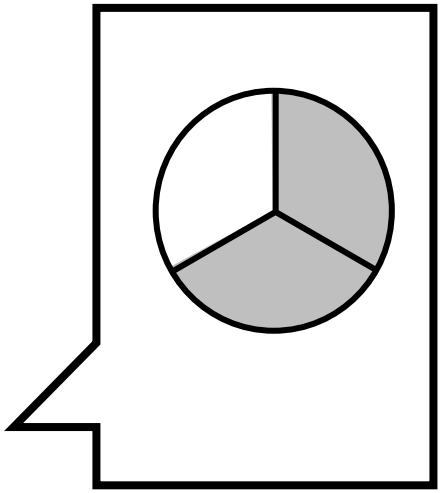
C. equivalent, because the shaded area of Strip A is the same as the shaded area of Strip B

D. not equivalent, because Strip A has 3 shaded parts and Strip B has 6 shaded parts

3.3.F - 3.3.G – Equivalent Fractions and Comparing Fractions
Problem Set: 2

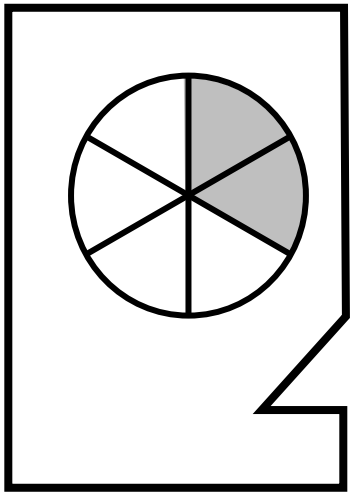
1. C	**2.** C	**3.** B	**4.** A	**5.** C	**6.** C
7. B	**8.** C	**9.** D	**10.** A	**11.** A	**12.** C
13. B	**14.** B	**15.** B	**16.** B	**17.** D	**18.** D
19. A	**20.** B	**21.** B	**22.** C	**23.** B	**24.** D
25. D	**26.** C	**27.** D	**28.** D	**29.** D	**30.** B

7. Nelson is playing a math game. He needs to match two cards that show equivalent shaded fractions.

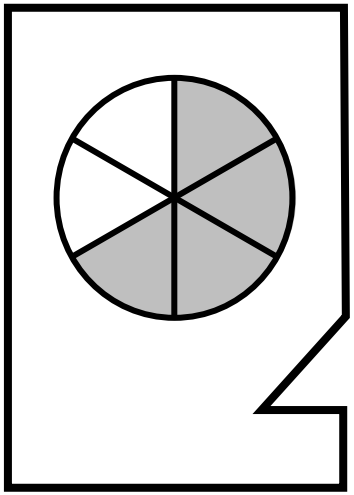


Which of these cards shows a fraction that is equivalent to the fraction on Nelson's card?

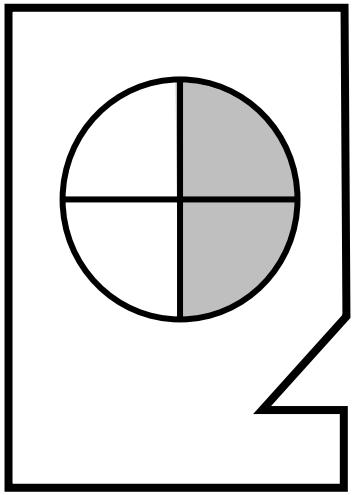
A



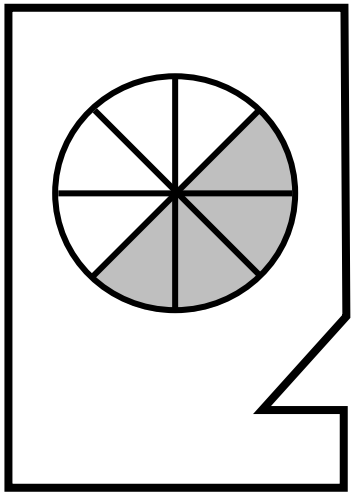
B



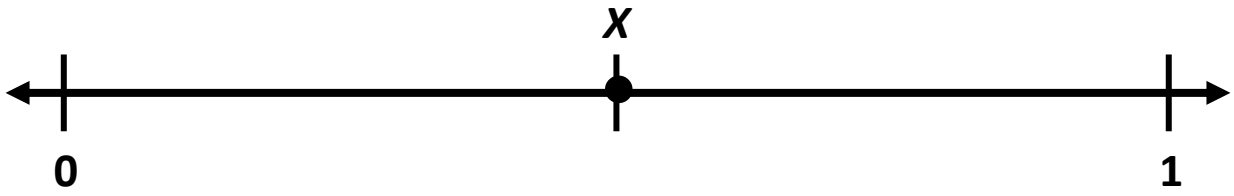
C



D

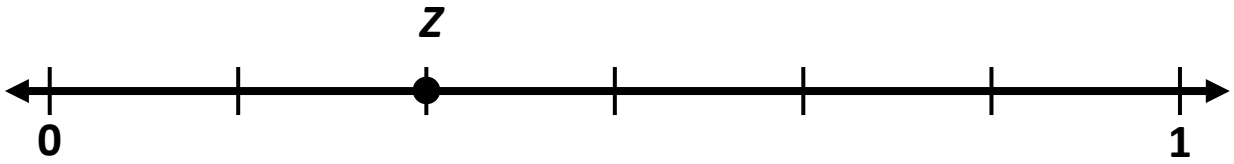


8. Point *X* on the number line represents a fraction.

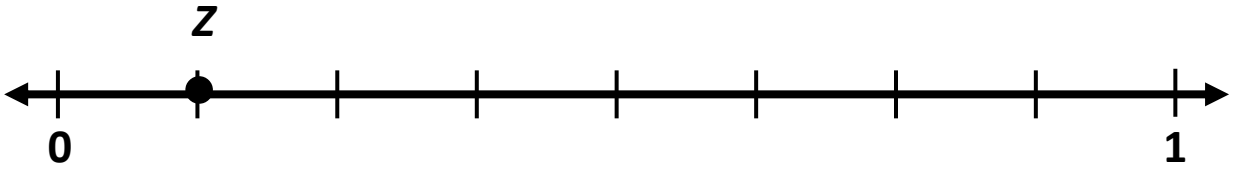


Which of these number lines shows a fraction equivalent Point *X* on the number Line?

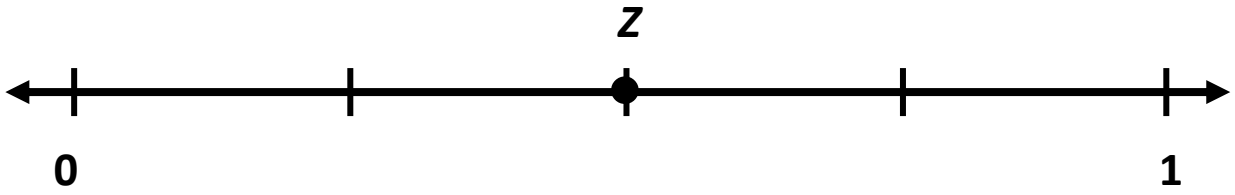
A.



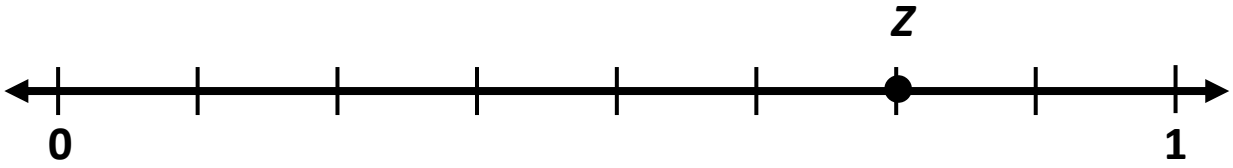
B.



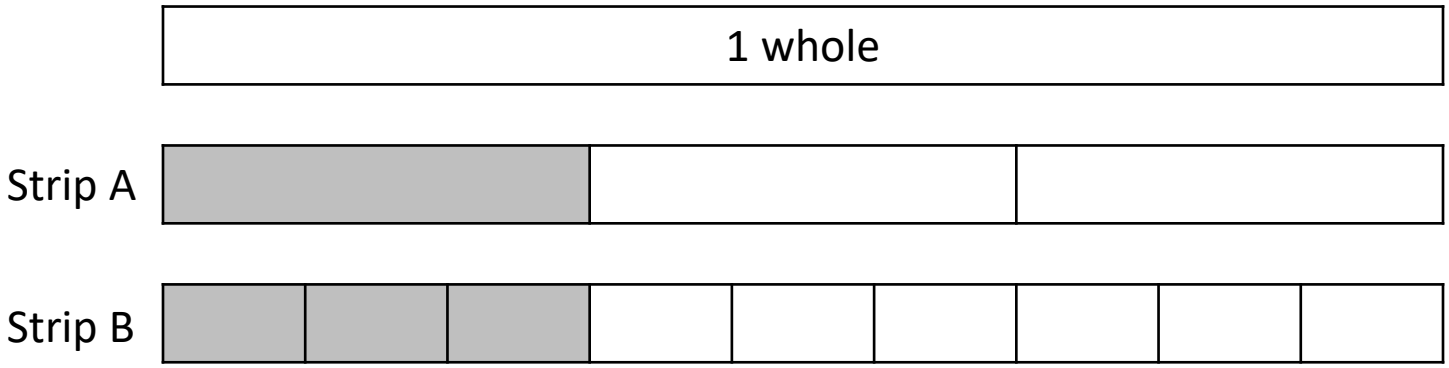
C.



D.



9. Each strip of the diagram is shaded to represent a fraction of 1 whole.



The fractions represented are –

A. not equivalent, because Strip A has 1 shaded parts and Strip B has 3 shaded parts.

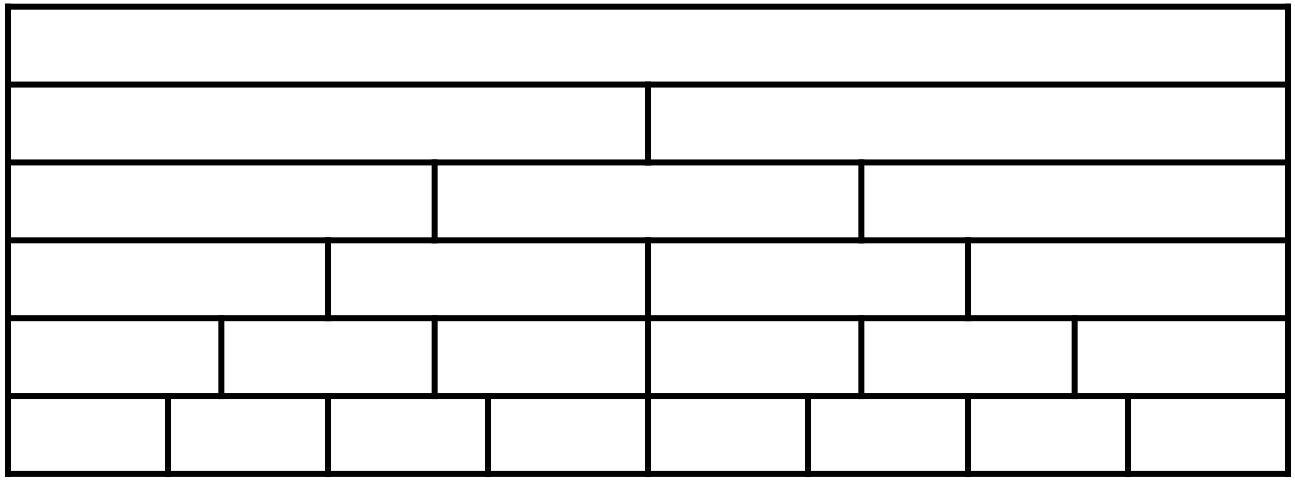
B. equivalent, because the shaded area of Strip B is greater than the shaded area of Strip A.

C. not equivalent, because Strip A has 3 parts in all, and Strip B has 9 parts in all.

D. equivalent, because the shaded area of Strip A is the same as the shaded area of Strip B.

10. Alyssa used fraction strips like the ones shown in the diagram in order to find equivalent fractions.

Fraction Strips



Which list shows only fractions that are equivalent to $\frac{1}{2}$?

A. $\frac{2}{4}, \frac{3}{6}, \frac{4}{8}$

B. $\frac{2}{4}, \frac{4}{6}, \frac{6}{8}$

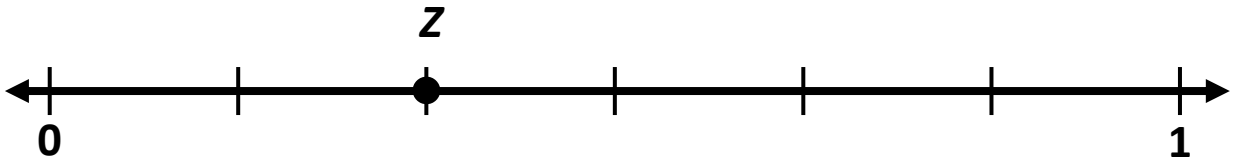
C. $\frac{1}{4}, \frac{1}{6}, \frac{1}{8}$

D. $\frac{2}{3}, \frac{3}{4}, \frac{5}{6}$

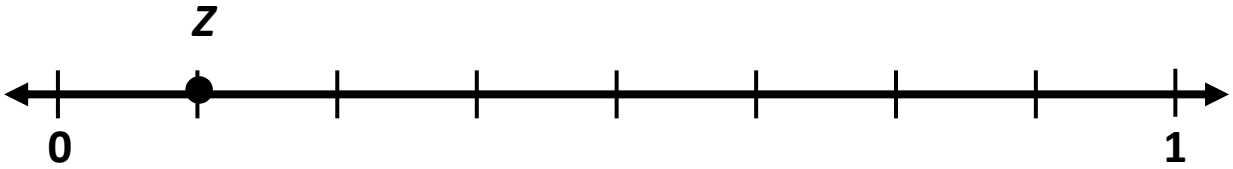
11. Point *X* on the number line represents a fraction.

Which of these number lines shows a fraction equivalent Point *X*?

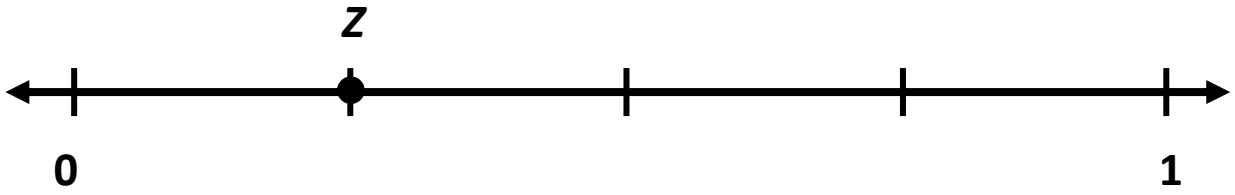
A.



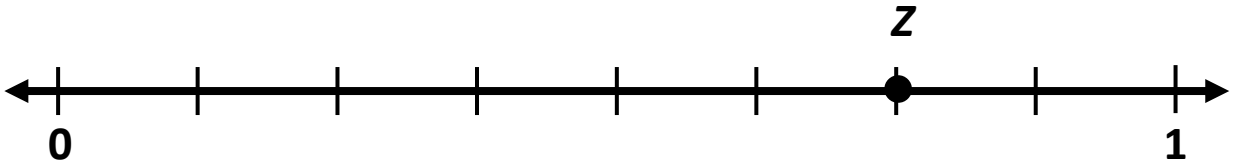
B.



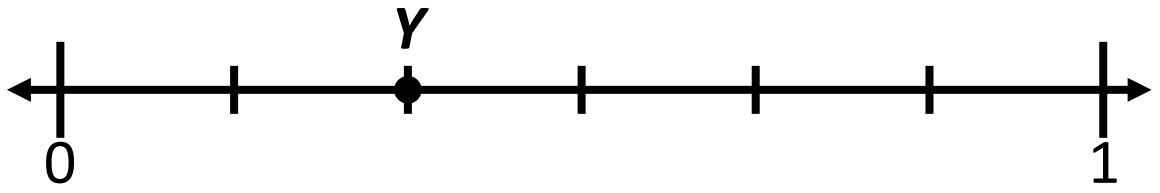
C.



D.



12. Point *Y* is labeled on the number line.



A. Point Y represents $\frac{3}{6}$ and $\frac{2}{4}$, because both fractions represent half of the number line.

B. Point Y represents $\frac{2}{6}$ and $\frac{3}{6}$, because both fractions represent 6 equal parts of a whole.

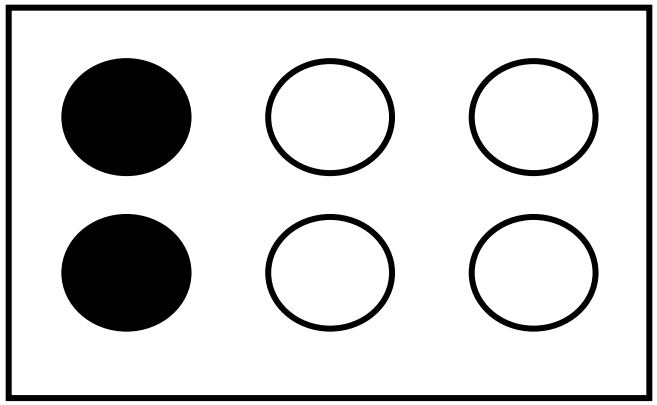
C. Point Y represents $\frac{2}{6}$ and $\frac{1}{3}$, because both fractions are exactly one third of the way between 0 and 1 on the number line.

D. Point Y represents $\frac{2}{6}$ and $\frac{1}{2}$, because both fractions are exactly halfway between 0 and 1 on the number line.

3.3.F - 3.3.G – Equivalent Fractions and Comparing Fractions
Problem Set: 3

1. C	**2.** C	**3.** B	**4.** A	**5.** C	**6.** C
7. B	**8.** C	**9.** D	**10.** A	**11.** A	**12.** C
13. B	**14.** B	**15.** B	**16.** B	**17.** D	**18.** D
19. A	**20.** B	**21.** B	**22.** C	**23.** B	**24.** D
25. D	**26.** C	**27.** D	**28.** D	**29.** D	**30.** B

13. Maddison has a group of counters, as shown.



Which two fractions can represent the black counters in the group?

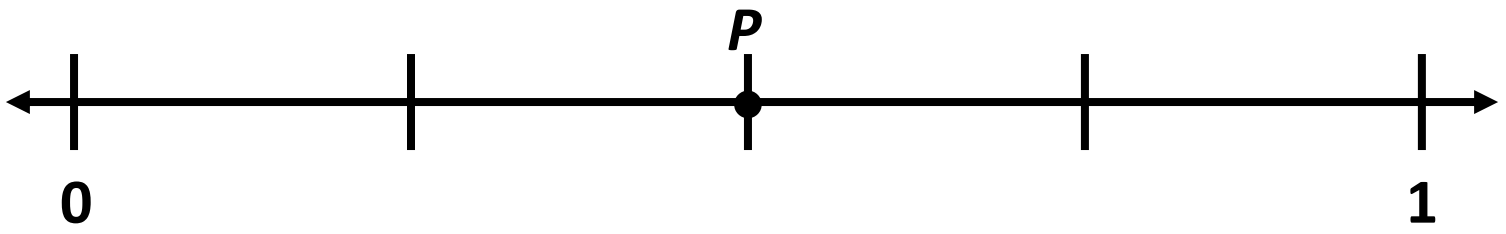
A. $\frac{2}{6}$ and $\frac{2}{8}$

B. $\frac{1}{3}$ and $\frac{2}{6}$

C. $\frac{1}{4}$ and $\frac{2}{8}$

D. $\frac{1}{4}$ and $\frac{2}{4}$

14. Point *P* on the number line represents two equivalent fractions.



Which two equivalent fractions can point *P* represent?

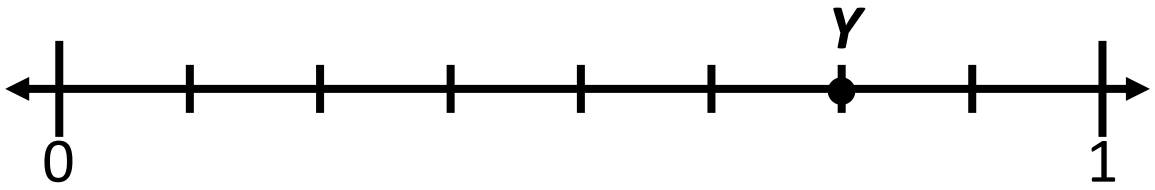
A. $\frac{1}{4}$ and $\frac{1}{2}$

B. $\frac{1}{2}$ and $\frac{2}{4}$

C. $\frac{2}{4}$ and $\frac{6}{8}$

D. $\frac{2}{4}$ and $\frac{3}{8}$

15. Point *Y* is labeled on the number line.



A. Point Y represents $\frac{6}{8}$ and $\frac{3}{4}$, because both fractions are more than halfway from 0 to 1 on the number line.

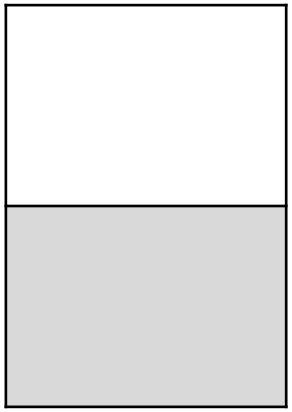
B. Point Y represents $\frac{6}{8}$ and $\frac{3}{4}$, because both fractions are exactly three fourths of the way between 0 and 1 on the number line.

C. Point Y represents $\frac{3}{6}$ and $\frac{6}{8}$, because both fractions are exactly three fourths of the way between 0 and 1 on the number line.

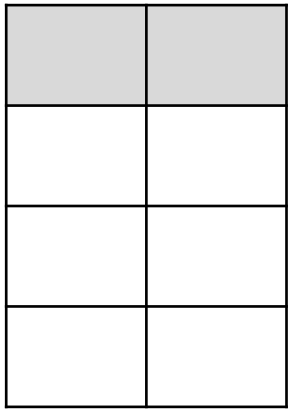
D. Point Y represents $\frac{4}{8}$ and $\frac{6}{8}$, because both fractions represent 8 equal parts of a whole.

16. Four fraction models are shown.

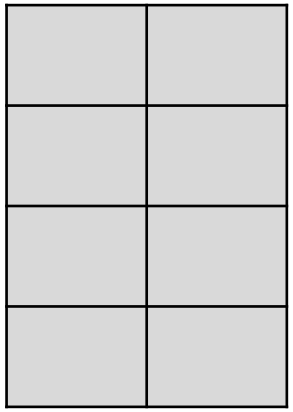
Model 1



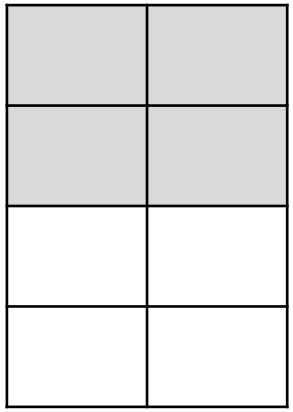
Model 2



Model 3



Model 4



Which two models are shaded to show equivalent fractions?

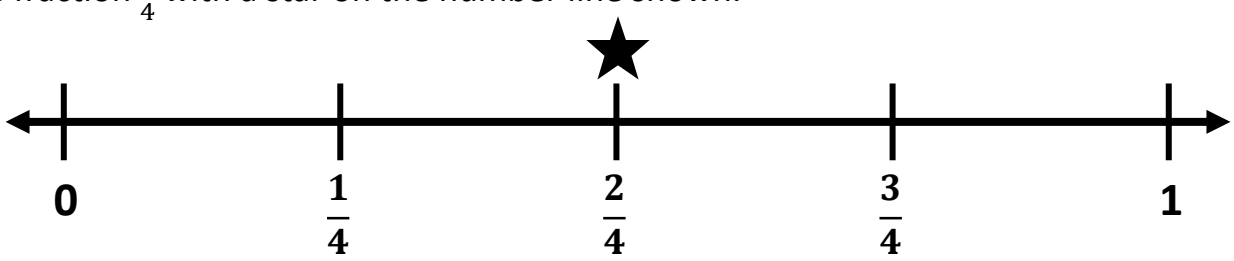
A. Models 1 and 2

B. Models 1 and 4

C. Models 2 and 4

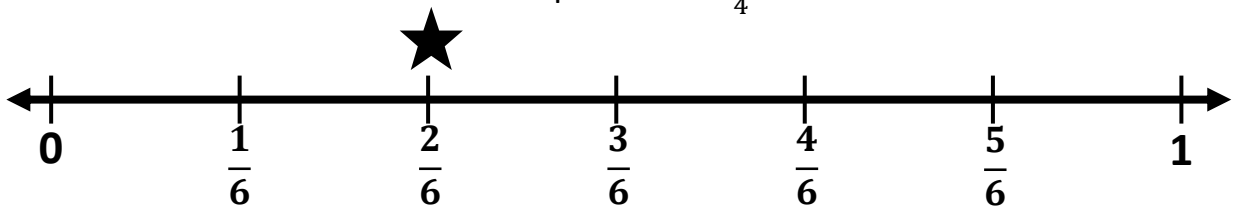
D. Models 2 and 3

17. Everly marked the fraction $\frac{2}{4}$ with a star on the number line shown.

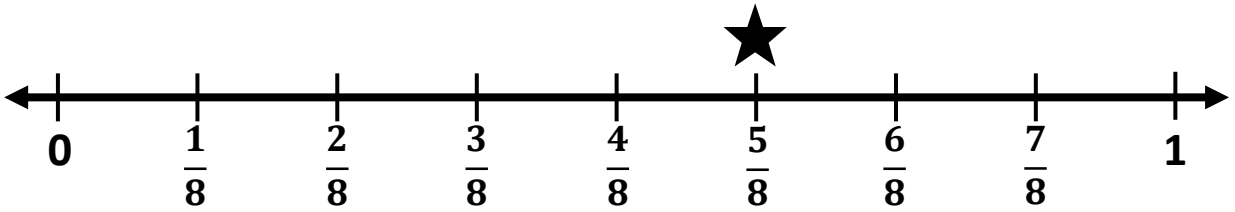


Which of these number lines shows a fraction equivalent to $\frac{2}{4}$ marked with a star?

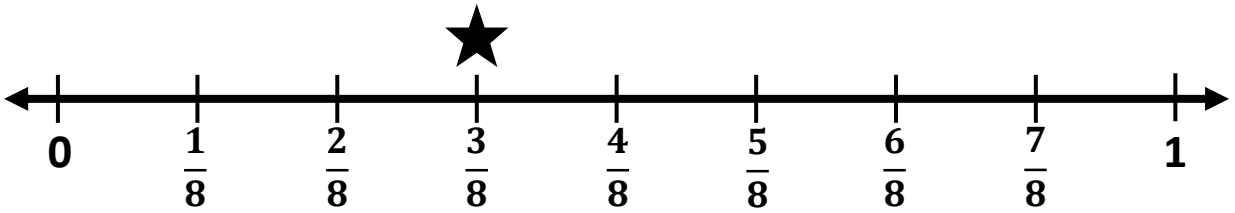
A.



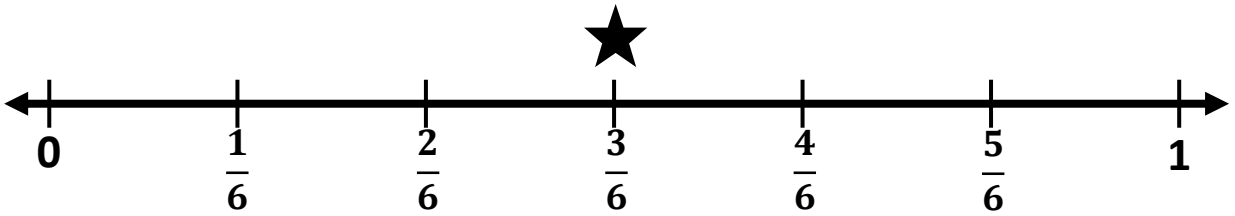
B.



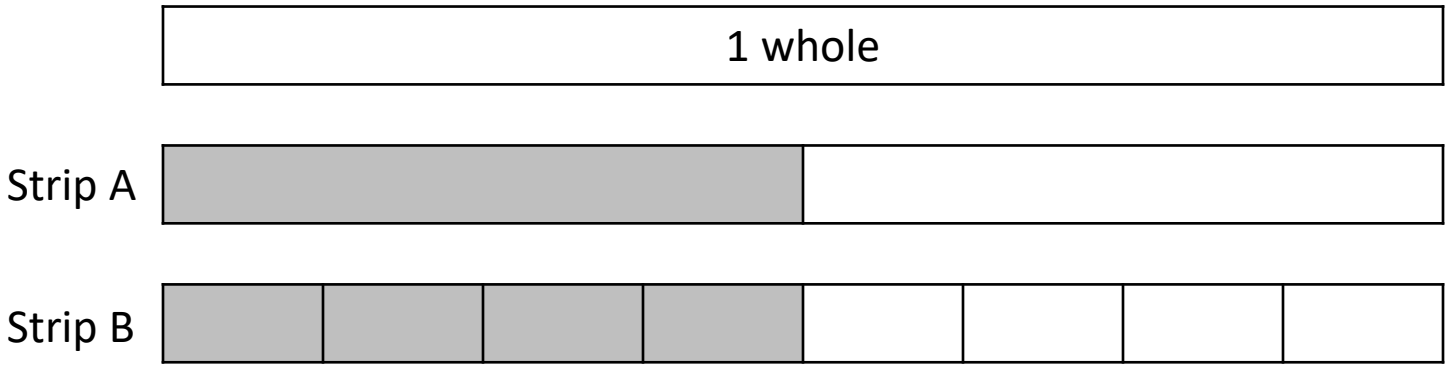
C.



D.



18. Each strip of the diagram is shaded to represent a fraction of 1 whole.



The fractions represented are –

A. equivalent, because the shaded area of Strip A is greater than the shaded area of Strip B.

B. not equivalent, because Strip A has 1 shaded parts and Strip B has 4 shaded parts.

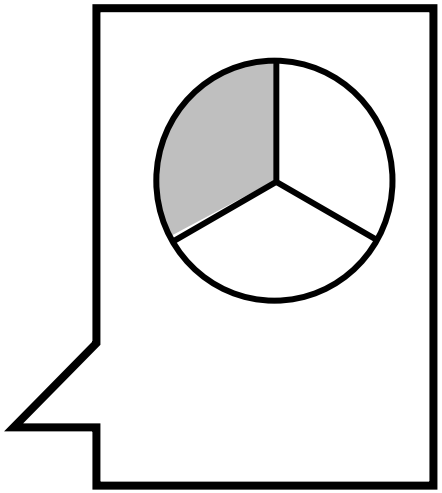
C. not equivalent, because Strip A has 2 parts in all, and Strip B has 8 parts in all.

D. equivalent, because the shaded area of Strip A is the same as the shaded area of Strip B.

3.3.F - 3.3.G – Equivalent Fractions and Comparing Fractions
Problem Set: 4

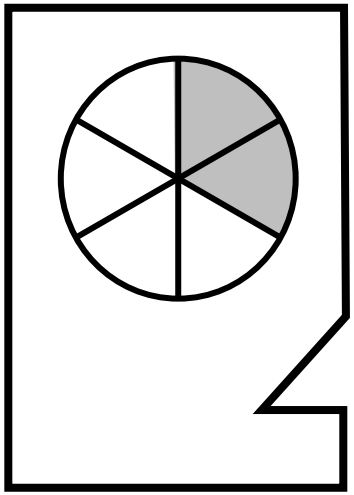
1. C	**2.** C	**3.** B	**4.** A	**5.** C	**6.** C
7. B	**8.** C	**9.** D	**10.** A	**11.** A	**12.** C
13. B	**14.** B	**15.** B	**16.** B	**17.** D	**18.** D
19. A	**20.** B	**21.** B	**22.** C	**23.** B	**24.** D
25. D	**26.** C	**27.** D	**28.** D	**29.** D	**30.** B

19. Nevaeh is playing a math game. She needs to match two cards that show equivalent shaded fractions.

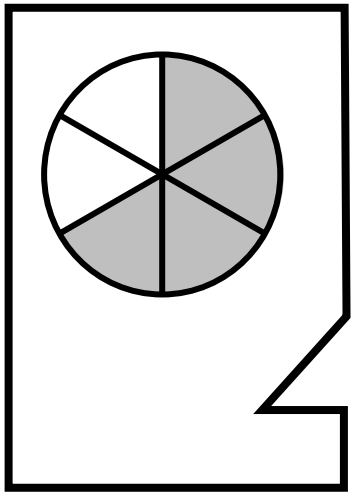


Which of these cards shows a fraction that is equivalent to the fraction on Nevaeh's card?

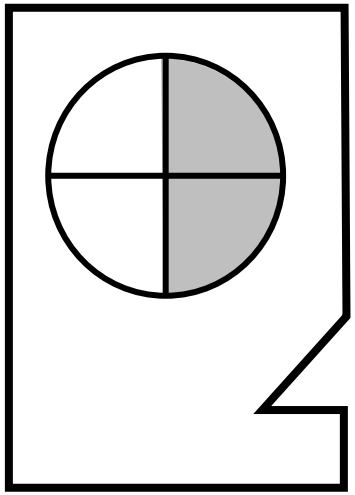
A



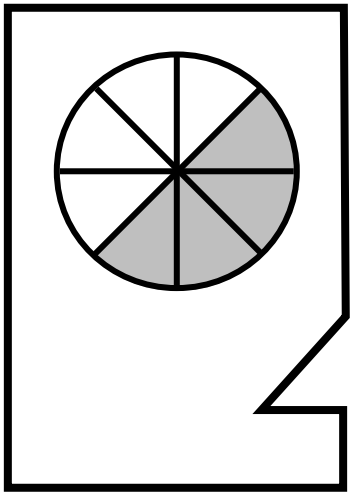
B



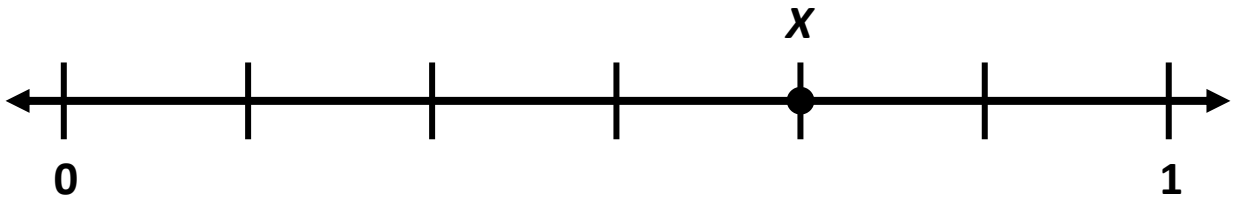
C



D

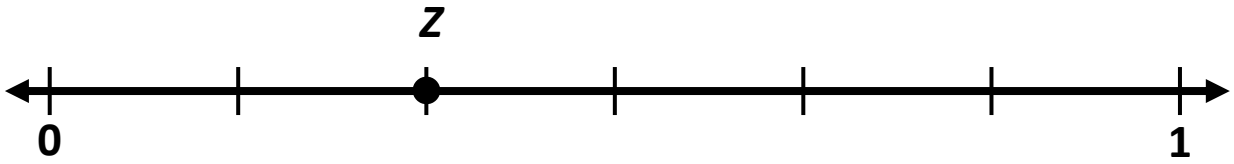


20. Point *X* on the number line represents a fraction.

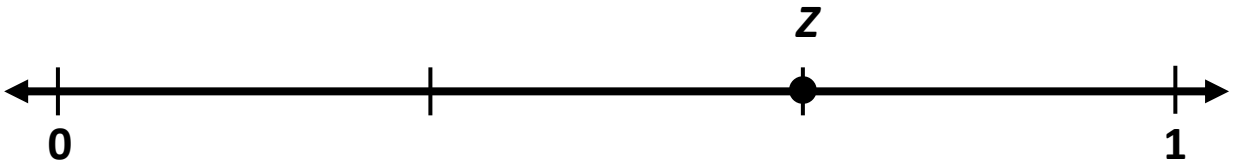


Which of these number lines shows a fraction equivalent Point *X*?

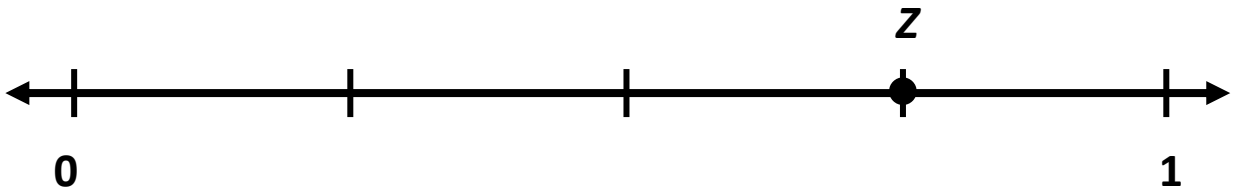
A.



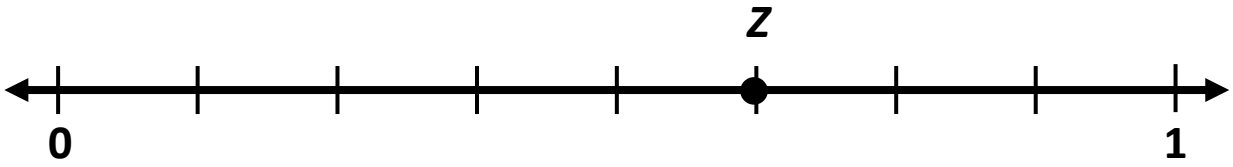
B.



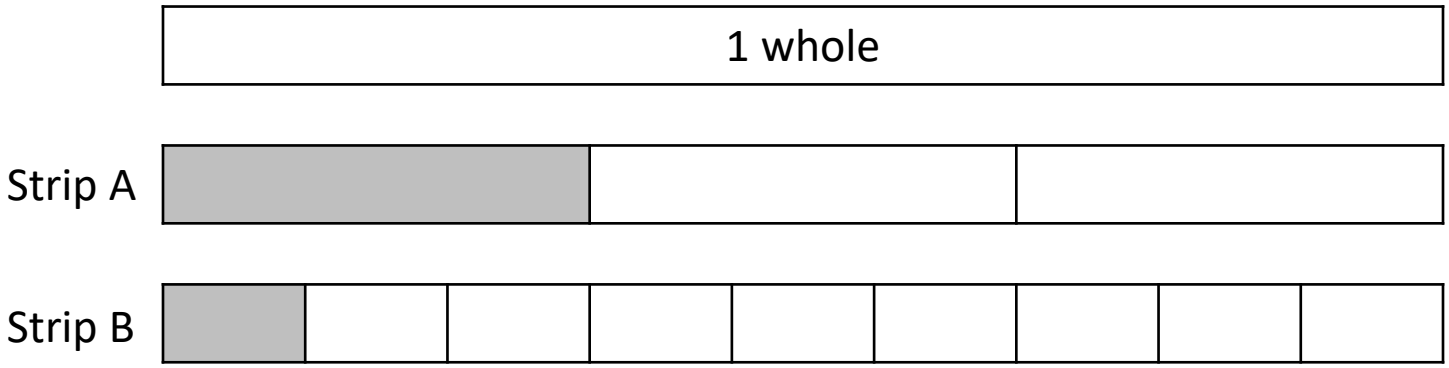
C.



D.



21. Each strip of the diagram is shaded to represent a fraction of 1 whole.



The fractions represented are –

A. equivalent, because Strip A has 1 shaded part and Strip B has 1 shaded part.

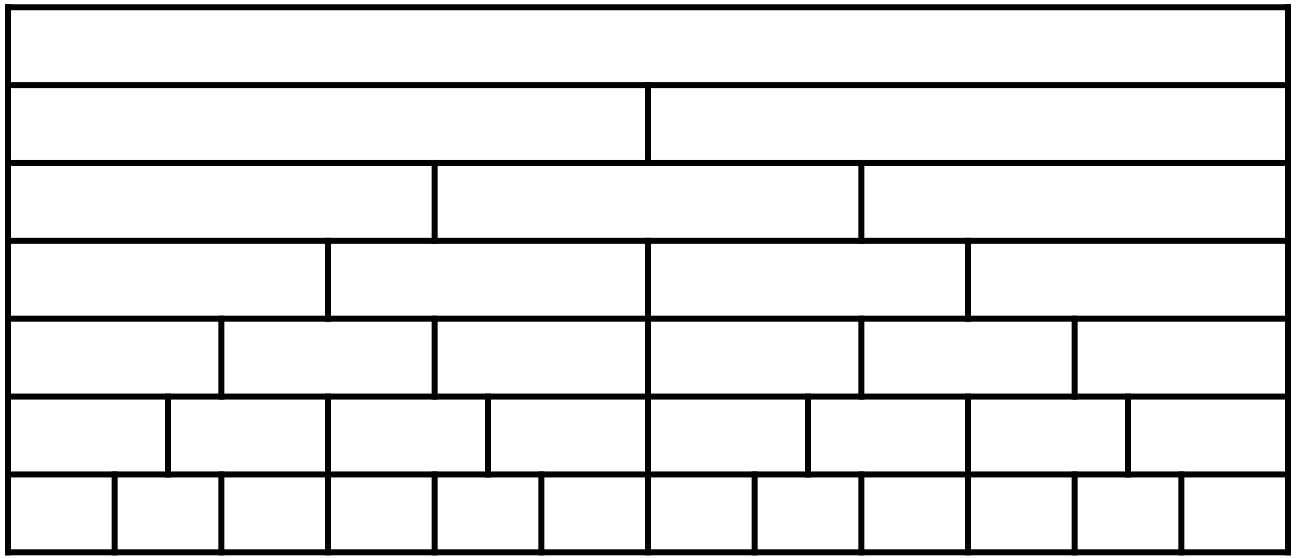
B. not equivalent, because the shaded area of Strip A is greater than the shaded area of Strip B.

C. not equivalent, because Strip A has 3 parts in all, and Strip B has 9 parts in all.

D. equivalent, because the shaded area of Strip A is the same as the shaded area of Strip B.

22. Belinda used fraction strips like the ones shown in the diagram in order to find equivalent fractions.

Fraction Strips



Which list shows only fractions that are equivalent to $\frac{1}{3}$?

A. $\frac{3}{6}, \frac{4}{8}$

B. $\frac{4}{8}, \frac{3}{12}$

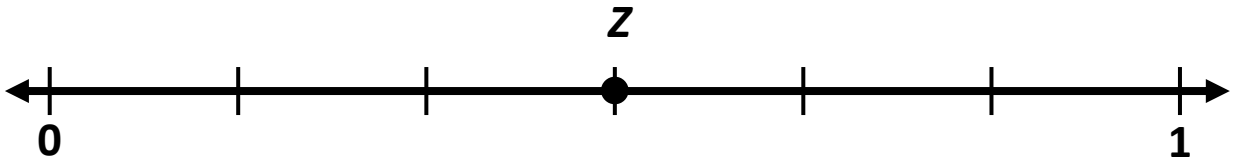
C. $\frac{2}{6}, \frac{4}{12}$

D. $\frac{2}{8}, \frac{3}{12}$

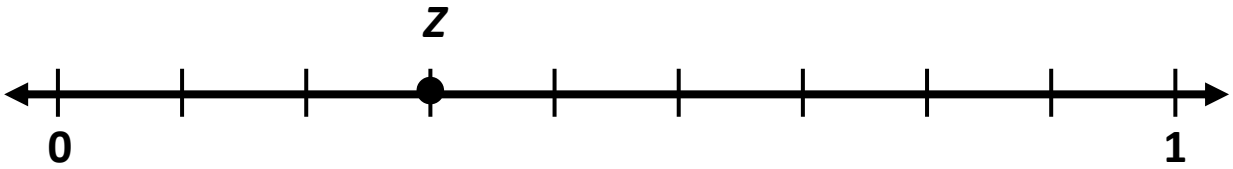
23. Point *X* on the number line represents a fraction.

Which of these number lines shows a fraction equivalent Point *X* on the number Line?

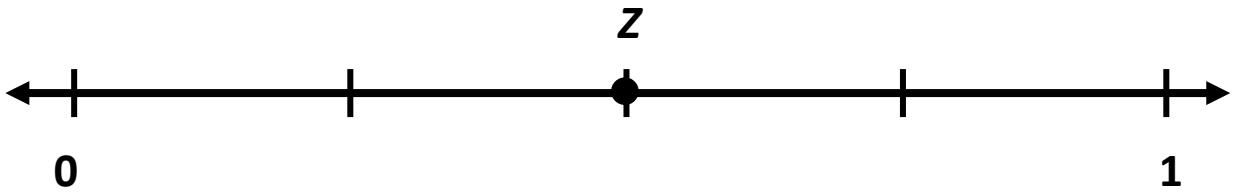
A.



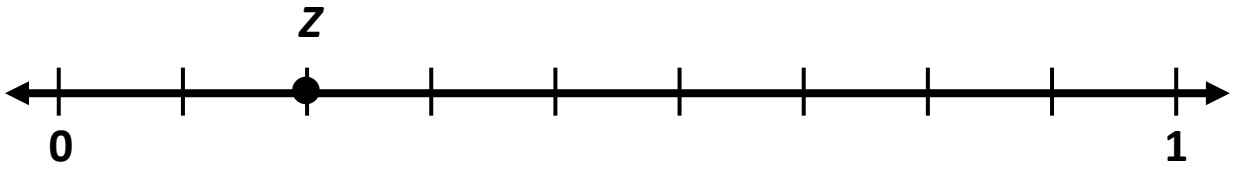
B.



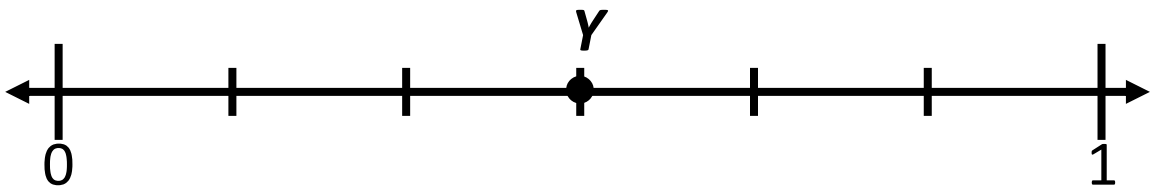
C.



D.



24. Point *Y* is labeled on the number line.



A. Point Y represents $\frac{3}{6}$ and $\frac{3}{4}$, because both fractions represent 3 equal parts of a whole.

B. Point Y represents $\frac{4}{6}$ and $\frac{3}{6}$, because both fractions represent 6 equal parts of a whole.

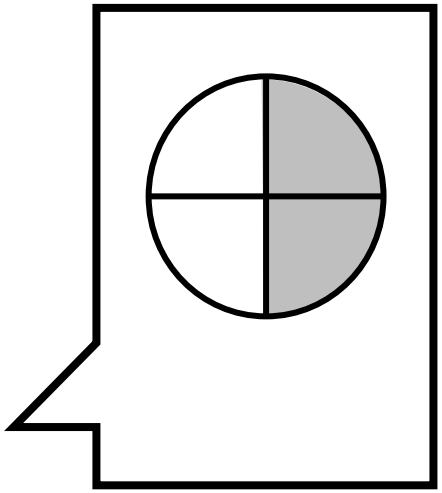
C. Point Y represents $\frac{4}{6}$ and $\frac{1}{2}$, because both fractions are exactly halfway between 0 and 1 on the number line.

D. Point Y represents $\frac{3}{6}$ and $\frac{1}{2}$, because both fractions are exactly halfway between 0 and 1 on the number line.

3.3.F - 3.3.G – Equivalent Fractions and Comparing Fractions
Problem Set: 5

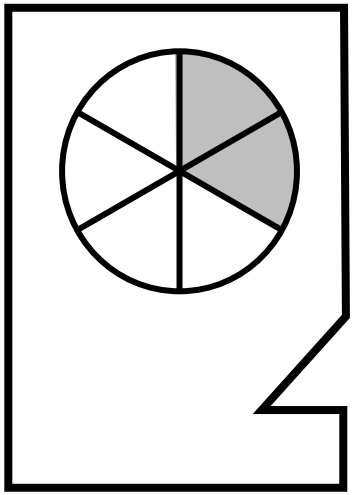
1. C	**2.** C	**3.** B	**4.** A	**5.** C	**6.** C
7. B	**8.** C	**9.** D	**10.** A	**11.** A	**12.** C
13. B	**14.** B	**15.** B	**16.** B	**17.** D	**18.** D
19. A	**20.** B	**21.** B	**22.** C	**23.** B	**24.** D
25. D	**26.** C	**27.** D	**28.** D	**29.** D	**30.** B

25. Neville is playing a math game. He needs to match two cards that show equivalent shaded fractions.

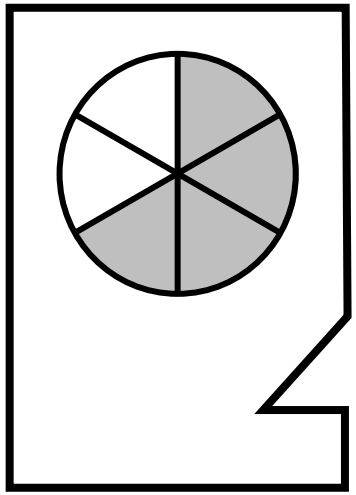


Which of these cards shows a fraction that is equivalent to the fraction on Neville's card?

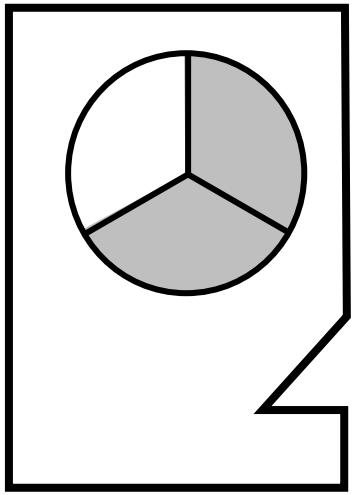
A



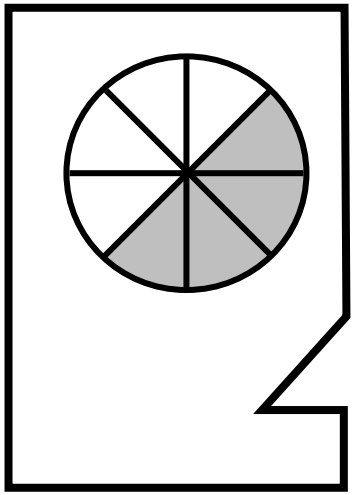
B



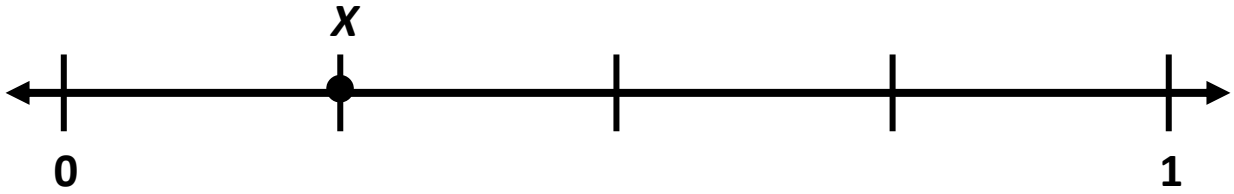
C



D

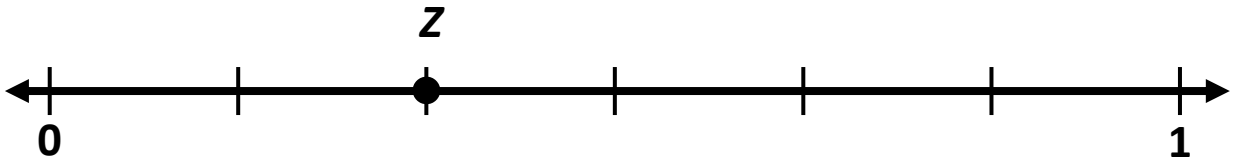


26. Point *X* on the number line represents a fraction.

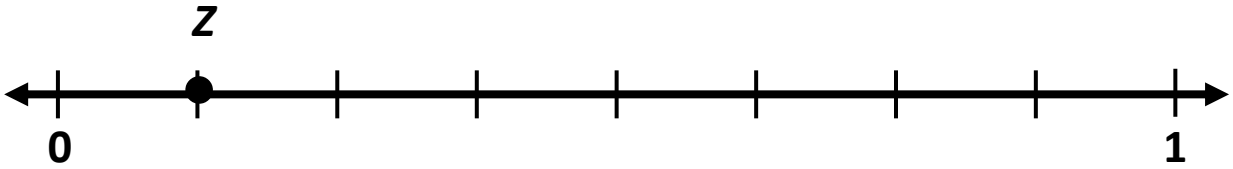


Which of these number lines shows a fraction equivalent Point *X* on the number Line?

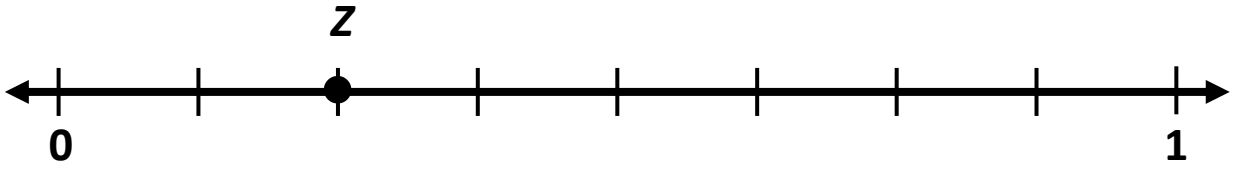
A.



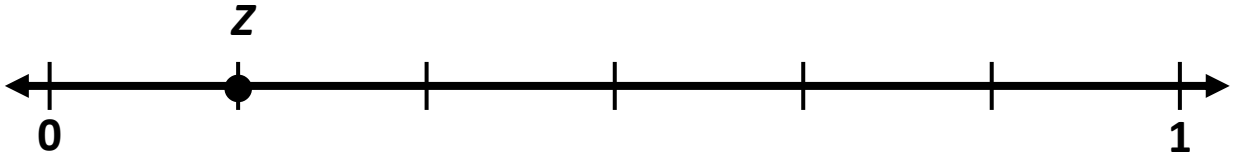
B.



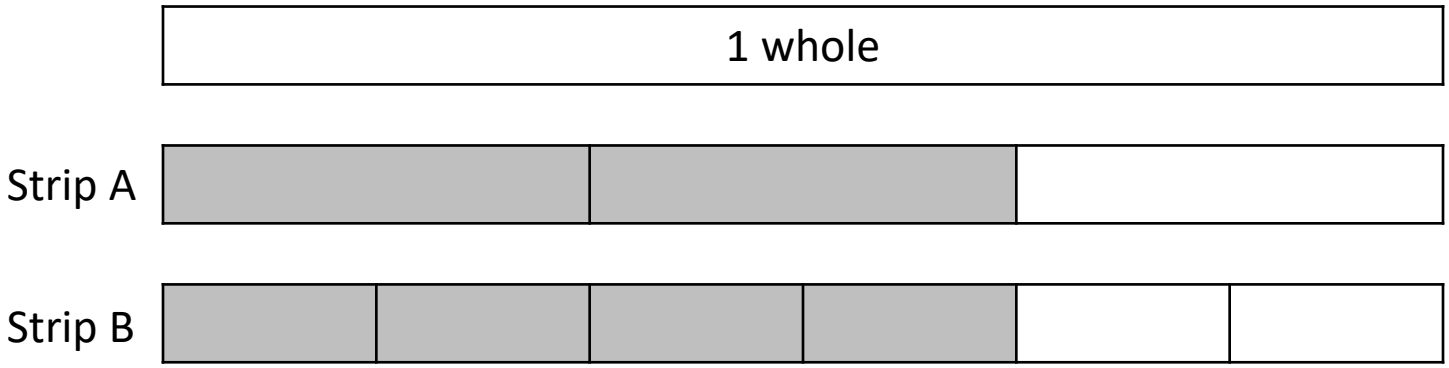
C.



D.



27. Each strip of the diagram is shaded to represent a fraction of 1 whole.



The fractions represented are –

A. equivalent, because the shaded area of Strip A is greater than the shaded area of Strip B.

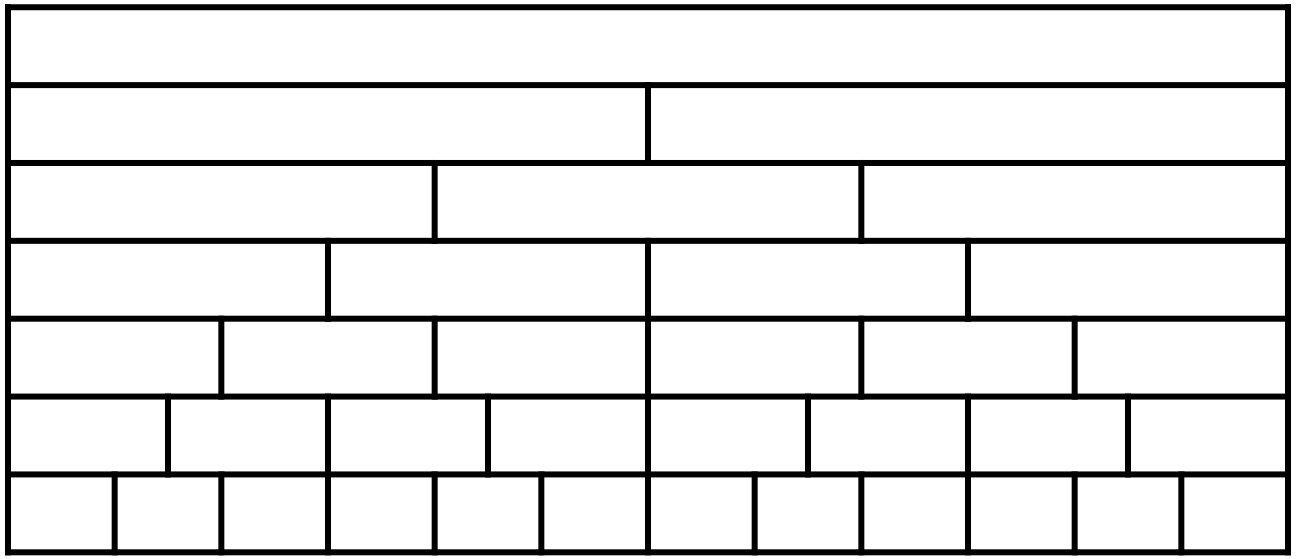
B. not equivalent, because Strip A has 3 parts in all, and Strip B has 6 parts in all.

C. not equivalent, because Strip A has 2 shaded parts and Strip B has 4 shaded parts.

D. equivalent, because the shaded area of Strip A is the same as the shaded area of Strip B.

28. Arnold used fraction strips like the ones shown in the diagram in order to find equivalent fractions.

Fraction Strips



Which list shows only fractions that are equivalent to $\frac{3}{4}$?

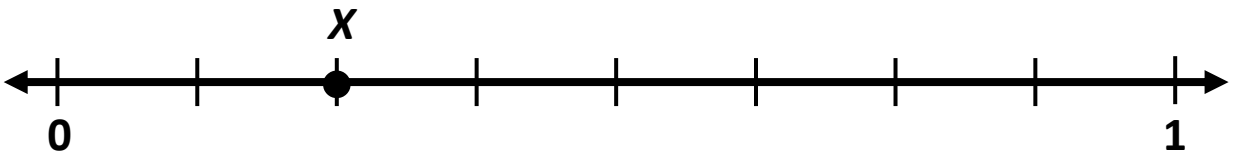
A. $\frac{2}{6}, \frac{3}{8}$

B. $\frac{2}{8}, \frac{3}{12}$

C. $\frac{1}{6}, \frac{2}{8}$

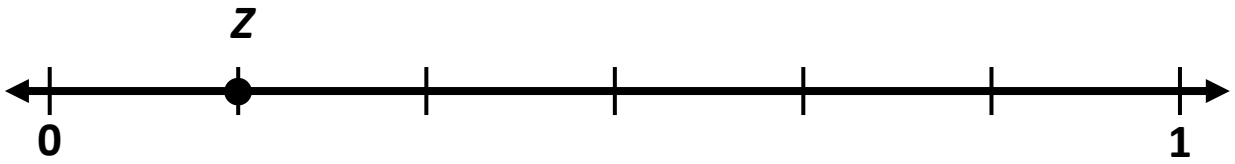
D. $\frac{6}{8}, \frac{9}{12}$

29. Point *X* on the number line represents a fraction.

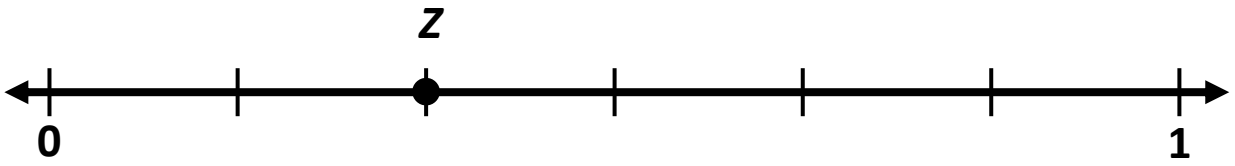


Which of these number lines shows a fraction equivalent Point *X* on the number Line?

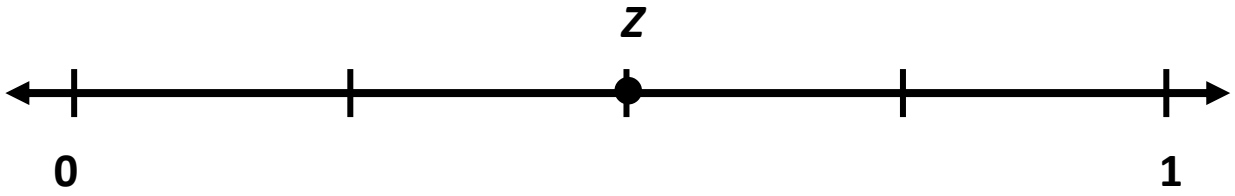
A.



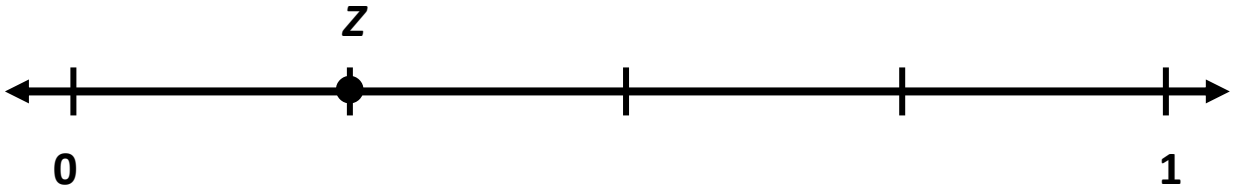
B.



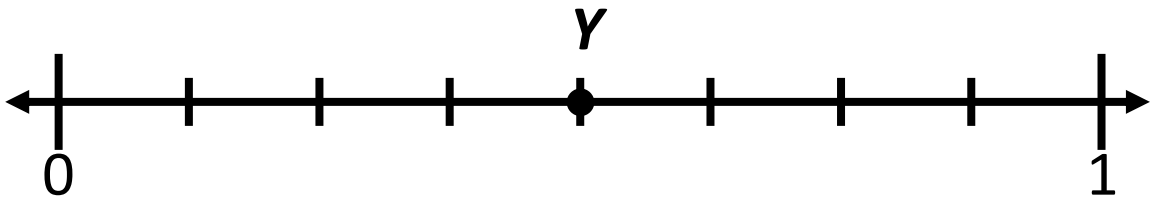
C.



D.



30. Point *Y* is labeled on the number line.



A. Point Y represents $\frac{4}{8}$ and $\frac{5}{8}$, because both fractions represent 8 equal parts of a whole.

B. Point Y represents $\frac{4}{8}$ and $\frac{1}{2}$, because both fractions are exactly halfway between 0 and 1 on the number line.

C. Point Y represents $\frac{4}{8}$ and $\frac{8}{4}$, because those are two ways of expressing the same fraction.

D. Point Y represents $\frac{4}{8}$ and $\frac{1}{4}$, because both fractions are exactly halfway between 0 and 1 on the number line.

Equivalent fractions might be a good place to use some kind of paper folding or something to help make the idea of equivalent fractions more concrete.

Maybe some kind of game where you say whether a fraction is larger or smaller than ½ ¼, ¾ etc.