

**Unit: 4<sup>th</sup> – Multiplication & Division of Whole Numbers****4.5.D - Perimeter and Area of Rectangles****Problem Set: 1**

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<b>1</b>  C	<b>2</b>  B	<b>3</b>  B	<b>4</b>  D	<b>5</b>  A (3 X 5 = 15)	<b>6</b>  116 yards
<b>7</b>  C	<b>8</b>  B	<b>9</b>  D	<b>10</b>  C <small>(4 + 4 + 4 + 4) – (4 + 2 + 4 + 2)</small>	<b>11</b>  B	<b>12</b>  D
<b>13</b>  C	<b>14</b>  B	<b>15</b>  C (4 X 6 = 24)	<b>16</b>  96 feet	<b>17</b>  A	<b>18</b>  C
<b>19</b>  D	<b>20</b>  C <small>(5 + 7 + 5 + 7) – (6 + 3 + 6 + 3)</small>	<b>21</b>  D	<b>22</b>  C	<b>23</b>  B	<b>24</b>  C
<b>25</b>  C (7 X 2 = 14)	<b>26</b>  128 yards	<b>27</b>  C	<b>28</b>  D	<b>29</b>  B	<b>30</b>  C <small>(4 + 4 + 6 + 6) – (5 + 5 + 2 + 2)</small>



1. The rectangular top of Kathleen's desk has a length of 24 inches and a width of 17 inches. What is the area of the top of Kathleen's desk in square inches?

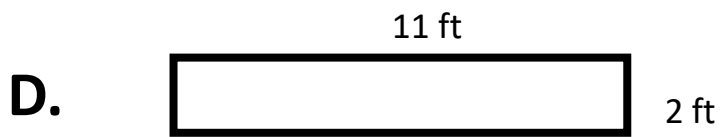
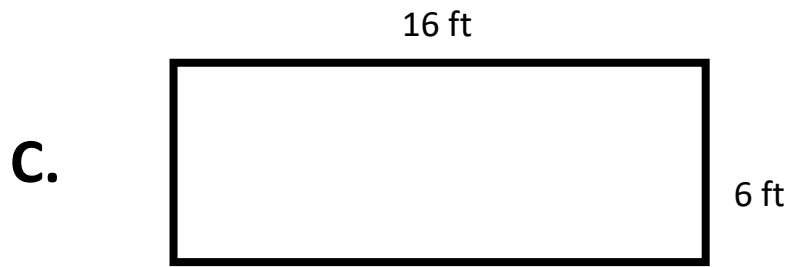
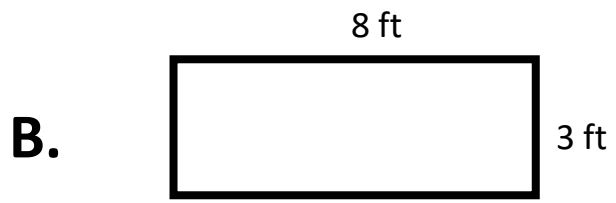
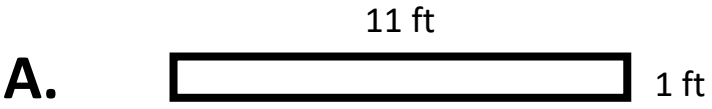
A. 192 square inches

B. 82 square inches

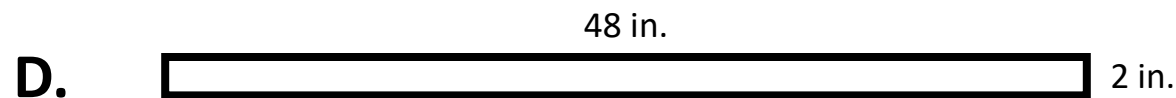
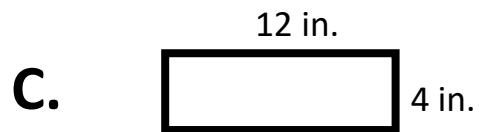
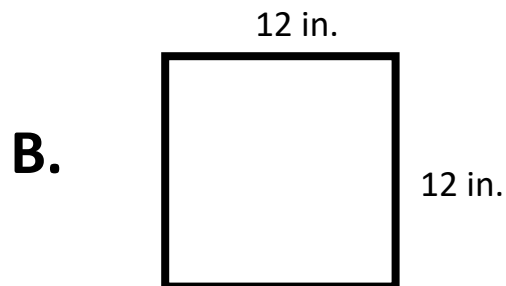
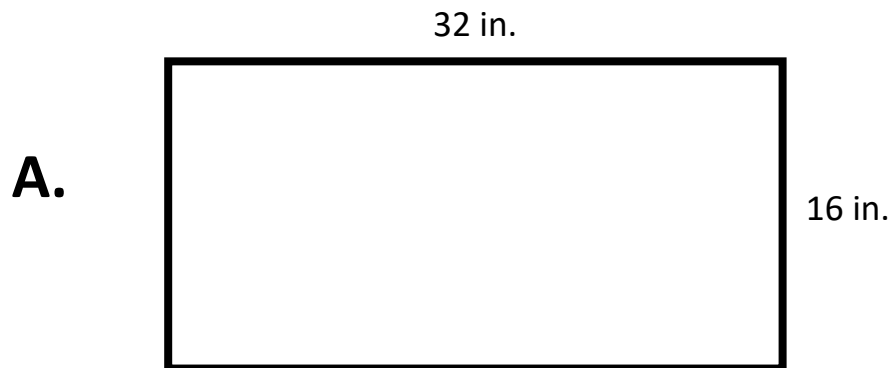
C. 408 square inches

D. 41 square inches

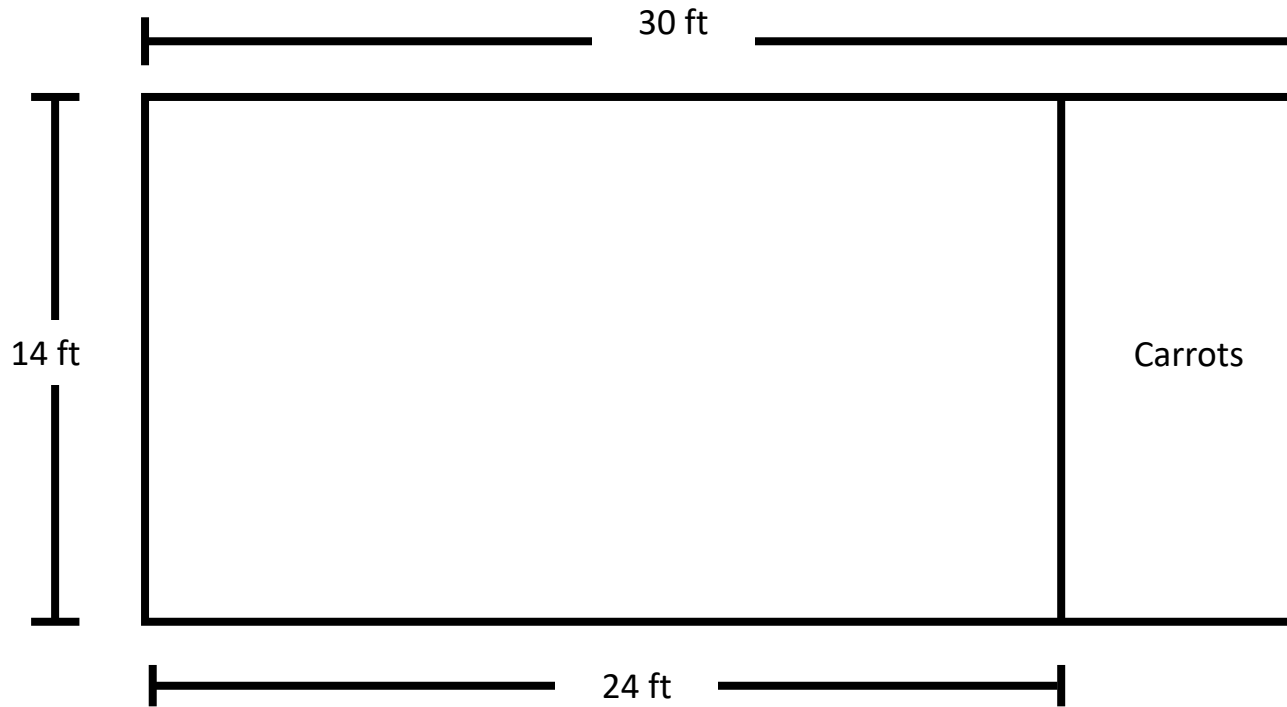
2. The perimeter of a rectangular bulletin board is 22 feet. Which model could show the dimensions of this bulletin board in feet?



3. Keith made a rectangular sign that had a perimeter of 48 inches. Which model could represent the sign that Keith made?



4. The model represents Norman's rectangular backyard garden. Norman will plant carrots in the rectangular section of the garden labeled "carrots" in the model.



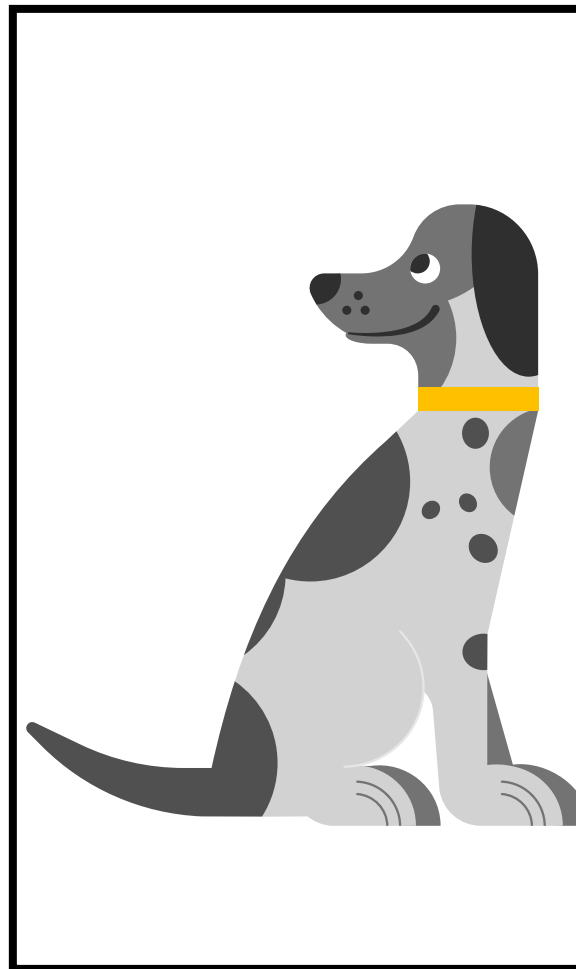
What is the area in square feet of the section where Norman will plant carrots?

- A. 40 square feet
- B. 224 square feet
- C. 336 square feet
- D. 84 square feet

5. Bonnie has a rectangular picture of her dog. Use the ruler provided to measure the length and width of the picture to the nearest inch.

Which measurement is closest to the area of the picture in square inches?

- A. 15 square inches
- B. 96 square inches
- C. 24 square inches
- D. 16 square inches



6. Mr. Yates walks around the perimeter of a square playground every day for exercise. Each side of the playground is 29 yards long.

What is the perimeter of the playground in yards?



**Unit: 4<sup>th</sup> – Multiplication & Division of Whole Numbers****4.5.D - Perimeter and Area of Rectangles****Problem Set: 2**

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<b>1</b>  C	<b>2</b>  B	<b>3</b>  B	<b>4</b>  D	<b>5</b>  A (3 X 5 = 15)	<b>6</b>  116 yards
<b>7</b>  C	<b>8</b>  B	<b>9</b>  D	<b>10</b>  C <small>(4 + 4 + 4 + 4) – (4 + 2 + 4 + 2)</small>	<b>11</b>  B	<b>12</b>  D
<b>13</b>  C	<b>14</b>  B	<b>15</b>  C (4 X 6 = 24)	<b>16</b>  96 feet	<b>17</b>  A	<b>18</b>  C
<b>19</b>  D	<b>20</b>  C <small>(5 + 7 + 5 + 7) – (6 + 3 + 6 + 3)</small>	<b>21</b>  D	<b>22</b>  C	<b>23</b>  B	<b>24</b>  C
<b>25</b>  C (7 X 2 = 14)	<b>26</b>  128 yards	<b>27</b>  C	<b>28</b>  D	<b>29</b>  B	<b>30</b>  C <small>(4 + 4 + 6 + 6) – (5 + 5 + 2 + 2)</small>



7. Sebastian had a rectangular piece of paper that was 90 mm long and 50 mm wide. He cut the paper in half. What is the area of each half of the paper in square millimeters?

- A. 4,500 square millimeters
- B. 9,000 square millimeters
- C. 2,250 square millimeters
- D. 1,125 square millimeters

8. A rug shaped like a rectangle has a width of 3 m. The length of the rug is 2 m greater than its width. What is the perimeter of the rug in meters?

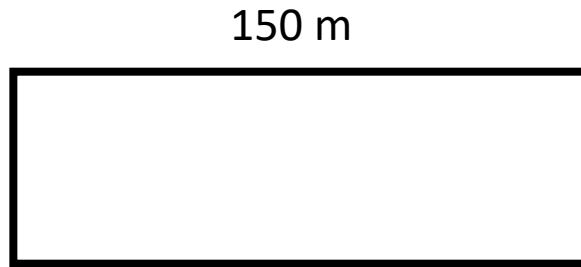
A. 10 m

B. 16 m

C. 8 m

D. 15 m

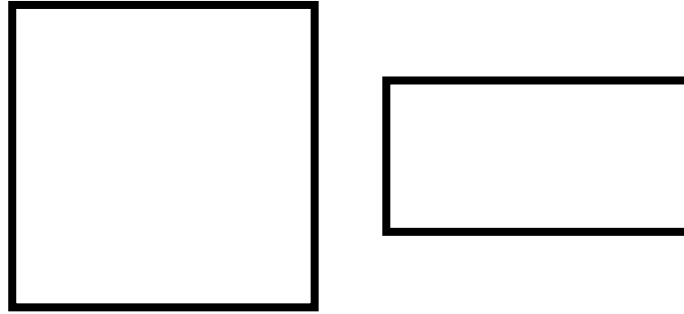
9. The model shows a rectangular field with a length of 150 m. The perimeter of the field is 400 m.



What is the width of the field in meters?

- A. 250 m
- B. 100 m
- C. 125 m
- D. 50 m

10. Use the ruler provided to measure the length and width of each rectangle to the nearest centimeter.



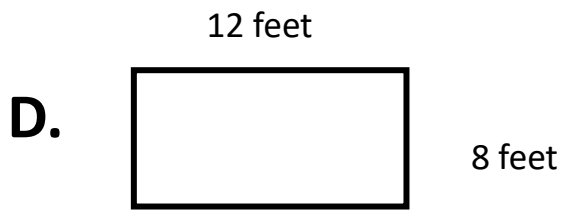
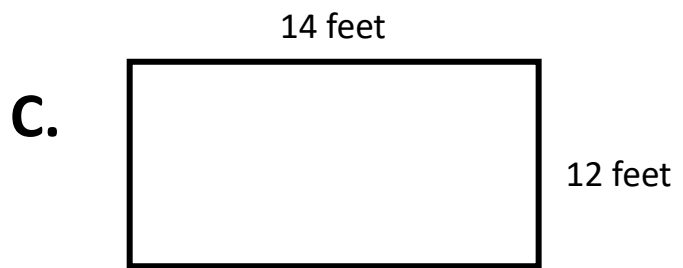
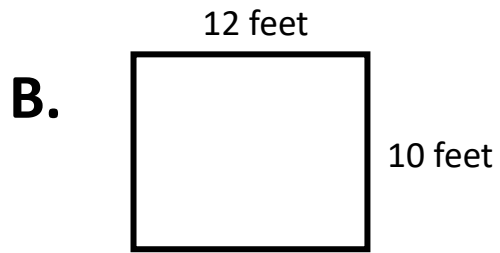
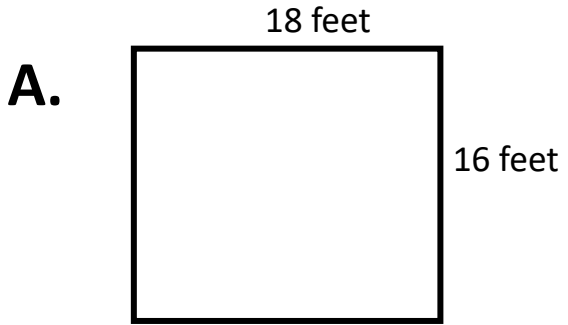
What is the difference between the perimeters of these rectangles in centimeters?

- A. 3 cm, because  $6 - 3 = 3$
- B. 2 cm, because  $8 - 6 = 2$
- C. 4 cm, because  $16 - 12 = 4$
- D. 1 cm, because  $9 - 8 = 1$

11. The rectangular rug in Liam's kitchen has a length of 25 inches and a width of 20 inches. What is the area of this rug in square inches?

- A. 90 square inches
- B. 500 square inches
- C. 180 square inches
- D. 1,000 square inches

12. The perimeter of a rectangular white board is 40 feet. Which model could show the dimensions of this white board in feet?





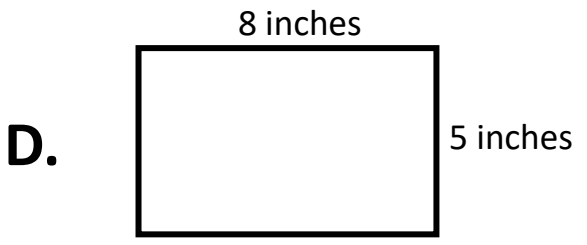
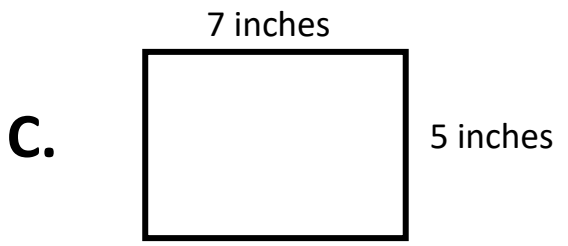
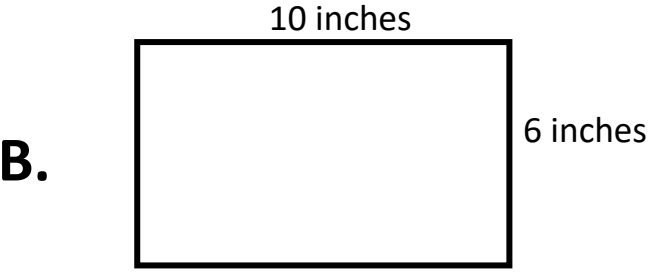
**Unit: 4<sup>th</sup> – Multiplication & Division of Whole Numbers****4.5.D - Perimeter and Area of Rectangles****Problem Set: 3**

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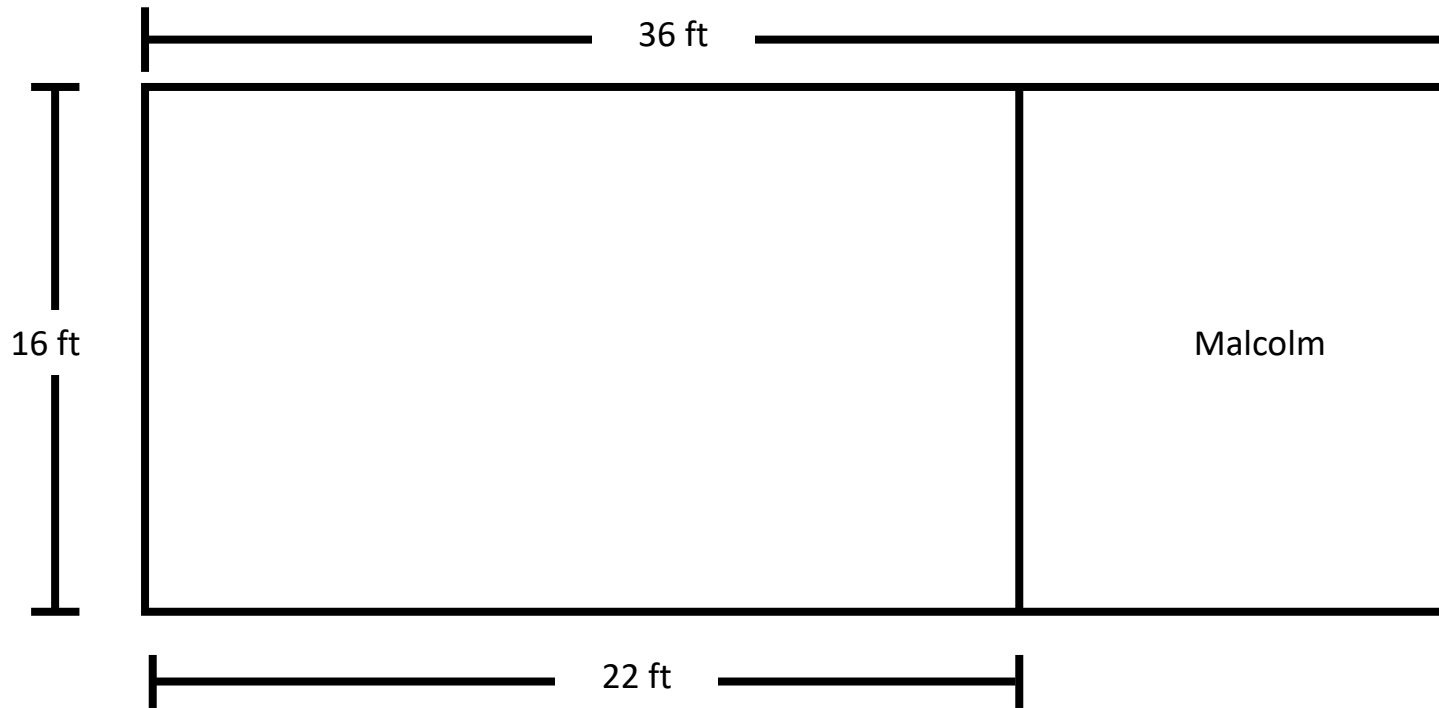
<b>1</b>  C	<b>2</b>  B	<b>3</b>  B	<b>4</b>  D	<b>5</b>  A (3 X 5 = 15)	<b>6</b>  116 yards
<b>7</b>  C	<b>8</b>  B	<b>9</b>  D	<b>10</b>  C <small>(4 + 4 + 4 + 4) – (4 + 2 + 4 + 2)</small>	<b>11</b>  B	<b>12</b>  D
<b>13</b>  C	<b>14</b>  B	<b>15</b>  C (4 X 6 = 24)	<b>16</b>  96 feet	<b>17</b>  A	<b>18</b>  C
<b>19</b>  D	<b>20</b>  C <small>(5 + 7 + 5 + 7) – (6 + 3 + 6 + 3)</small>	<b>21</b>  D	<b>22</b>  C	<b>23</b>  B	<b>24</b>  C
<b>25</b>  C (7 X 2 = 14)	<b>26</b>  128 yards	<b>27</b>  C	<b>28</b>  D	<b>29</b>  B	<b>30</b>  C <small>(4 + 4 + 6 + 6) – (5 + 5 + 2 + 2)</small>



13. Keira made a rectangular sign that had a perimeter of 24 inches. Which model could represent the sign that Keira made?



14. The model represents Nelda's rectangular backyard. Nelda is fencing off part of the yard for her dog, Malcolm.



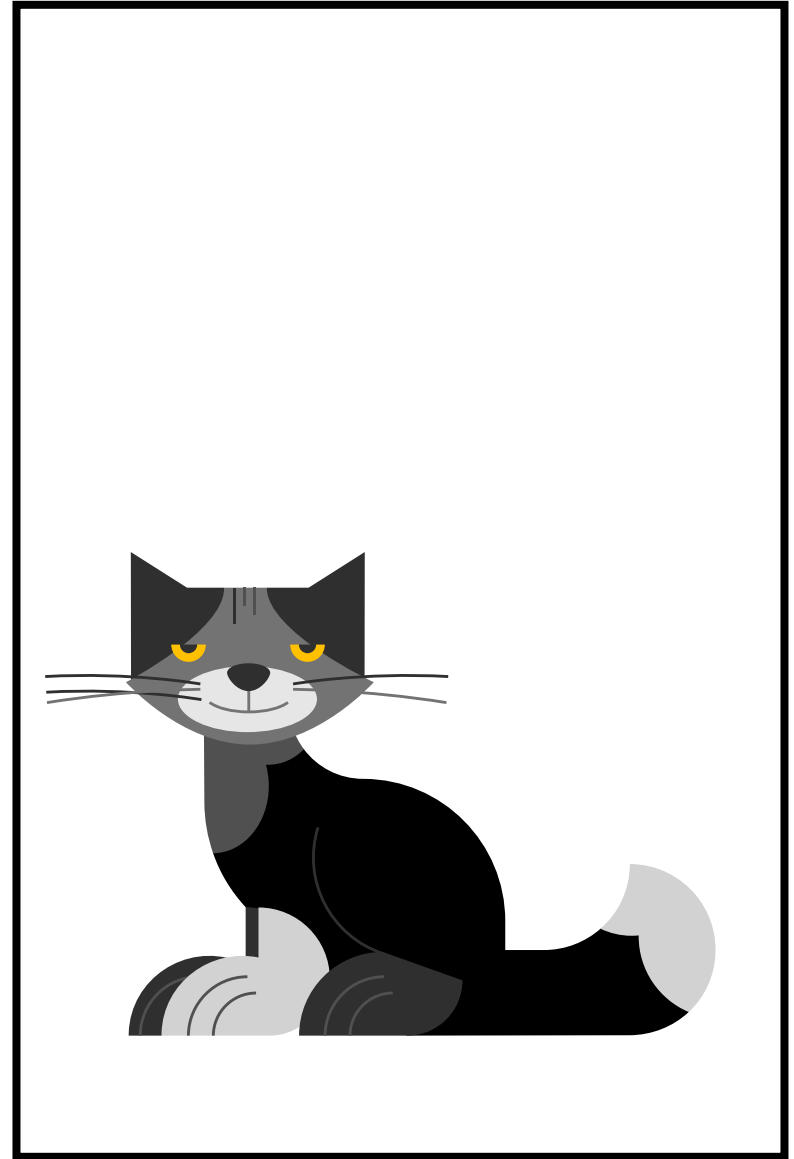
What is the area in square feet of the section for Malcolm?

- A. 40 square feet
- B. 224 square feet
- C. 336 square feet
- D. 84 square feet

15. Beatrix has a rectangular picture of her cat, Mr. Whiskers. Use the ruler provided to measure the length and width of the picture to the nearest inch.

Which measurement is closest to the area of the picture in square inches?

- A. 15 square inches
- B. 46 square inches
- C. 24 square inches
- D. 20 square inches



16. Jacob is taping around the perimeter of a square room he is painting. Each side of the room is 24 feet.

How much tape, in feet, will Jacob need to finish this task?

17. Serena had a rectangular piece of plywood that was 96 inches long and 48 inches wide. He cut the plywood in half. What is the area of each half of the piece of plywood in square inches?

- A. 2,304 square inches
- B. 1,152 square inches
- C. 2,500 square inches
- D. 288 square inches

18. A rug shaped like a rectangle has a width of 5 m. The length of the rug is 3 m greater than its width. What is the perimeter of the rug in meters?

- A. 8 M
- B. 24 M
- C. 26 M
- D. 40 M



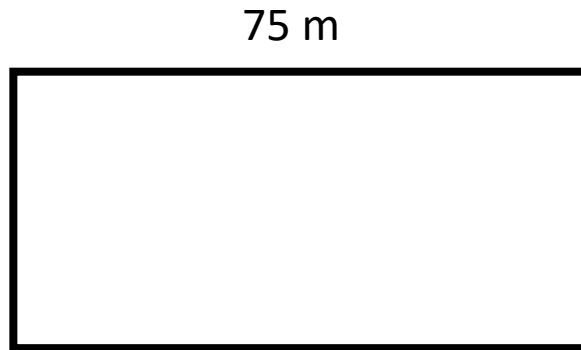
**Unit: 4<sup>th</sup> – Multiplication & Division of Whole Numbers****4.5.D - Perimeter and Area of Rectangles****Problem Set: 4**

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<b>1</b>  C	<b>2</b>  B	<b>3</b>  B	<b>4</b>  D	<b>5</b>  A (3 X 5 = 15)	<b>6</b>  116 yards
<b>7</b>  C	<b>8</b>  B	<b>9</b>  D	<b>10</b>  C <small>(4 + 4 + 4 + 4) – (4 + 2 + 4 + 2)</small>	<b>11</b>  B	<b>12</b>  D
<b>13</b>  C	<b>14</b>  B	<b>15</b>  C (4 X 6 = 24)	<b>16</b>  96 feet	<b>17</b>  A	<b>18</b>  C
<b>19</b>  D	<b>20</b>  C <small>(5 + 7 + 5 + 7) – (6 + 3 + 6 + 3)</small>	<b>21</b>  D	<b>22</b>  C	<b>23</b>  B	<b>24</b>  C
<b>25</b>  C (7 X 2 = 14)	<b>26</b>  128 yards	<b>27</b>  C	<b>28</b>  D	<b>29</b>  B	<b>30</b>  C <small>(4 + 4 + 6 + 6) – (5 + 5 + 2 + 2)</small>



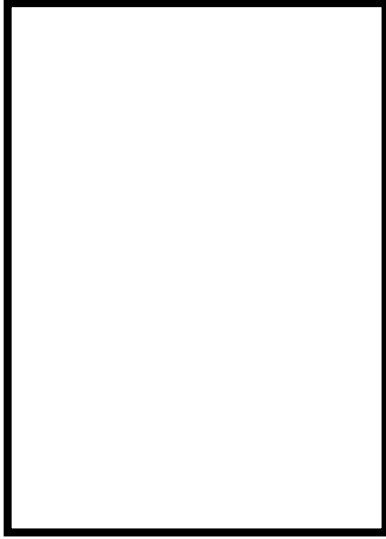
19. The model shows a rectangular field with a length of 75 m. The perimeter of the field is 250 m.



What is the width of the field in meters?

- A. 250 m
- B. 100 m
- C. 75 m
- D. 50 m

20. Use the ruler provided to measure the length and width of each rectangle to the nearest centimeter.



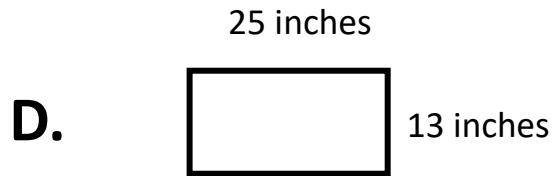
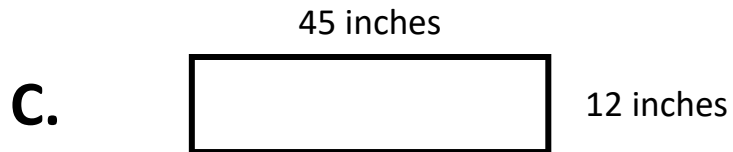
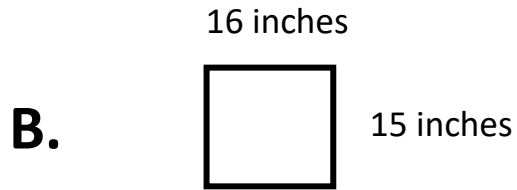
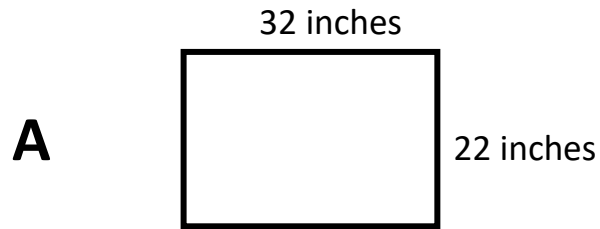
What is the difference between the perimeters of these rectangles in centimeters?

- A. 3 cm, because  $12 - 9 = 3$
- B. 4 cm, because  $7 - 3 = 4$
- C. 6 cm, because  $24 - 18 = 6$
- D. 17 cm, because  $35 - 18 = 17$

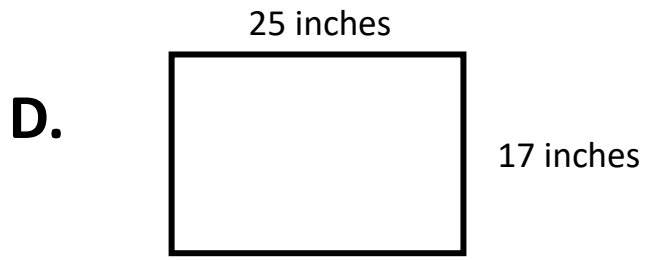
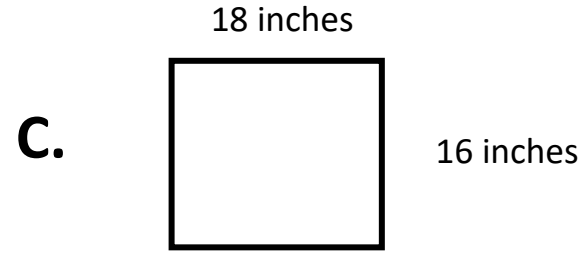
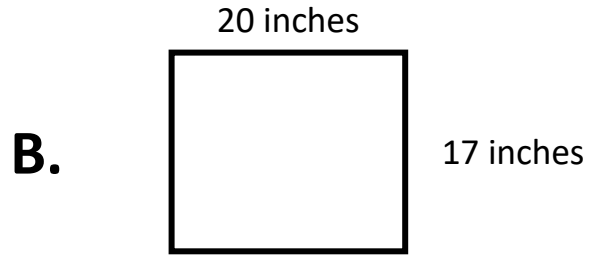
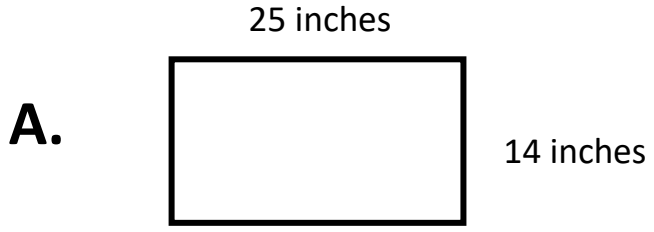
21. A rectangular countertop in Carlos' kitchen has a length of 36 inches and a width of 24 inches. What is the area of this countertop in square inches?

- A. 120 square inches
- B. 240 square inches
- C. 432 square inches
- D. 864 square inches

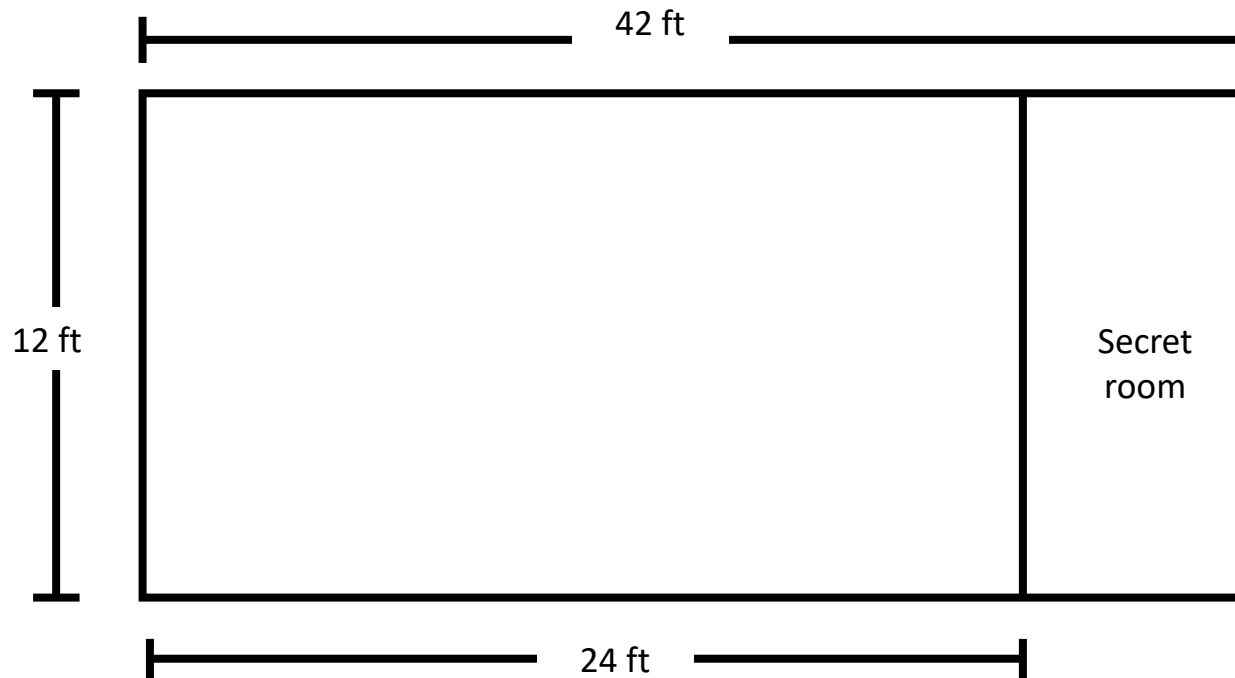
22. The perimeter of a rectangular piece of cardboard is 114 inches. Which model could show the dimensions of this piece of cardboard in inches?



23. Daniel made a rectangular sign that had a perimeter of 74 inches. Which model could represent the sign that Daniel made?



24. Creepy Cristabelle is walling off one part of the living room of her creepy castle to make a secret room. The model shows the current dimensions of her living room and the part she plans to make into the secret room.



What will be the area of the secret room once it is finished?

- A. 36 square feet
- B. 224 square feet
- C. 216 square feet
- D. 106 square feet



**Unit: 4<sup>th</sup> – Multiplication & Division of Whole Numbers****4.5.D - Perimeter and Area of Rectangles****Problem Set: 5**

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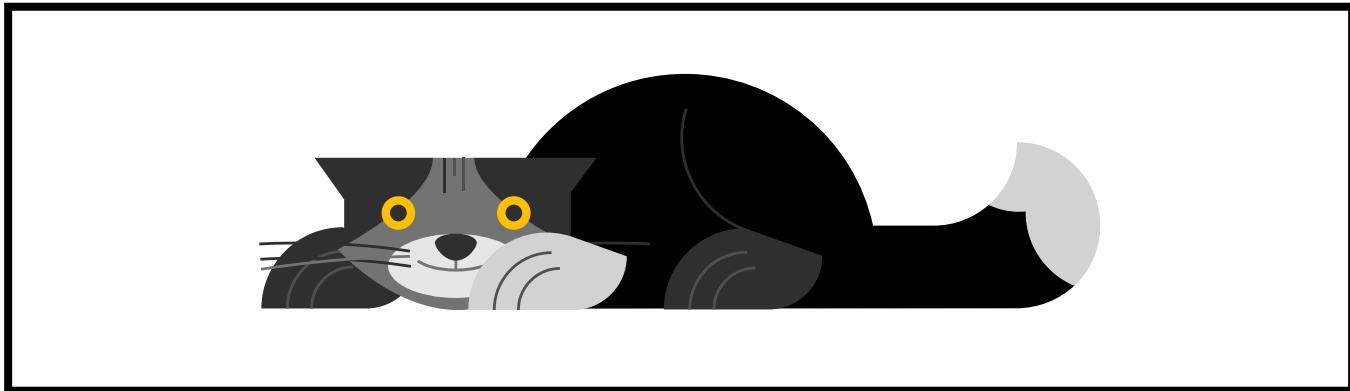
<b>1</b>  C	<b>2</b>  B	<b>3</b>  B	<b>4</b>  D	<b>5</b>  A (3 X 5 = 15)	<b>6</b>  116 yards
<b>7</b>  C	<b>8</b>  B	<b>9</b>  D	<b>10</b>  C <small>(4 + 4 + 4 + 4) – (4 + 2 + 4 + 2)</small>	<b>11</b>  B	<b>12</b>  D
<b>13</b>  C	<b>14</b>  B	<b>15</b>  C (4 X 6 = 24)	<b>16</b>  96 feet	<b>17</b>  A	<b>18</b>  C
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<b>25</b>  C (7 X 2 = 14)	<b>26</b>  128 yards	<b>27</b>  C	<b>28</b>  D	<b>29</b>  B	<b>30</b>  C <small>(4 + 4 + 6 + 6) – (5 + 5 + 2 + 2)</small>



25. Birdy has a rectangular picture of her cat, Sabrina. Use the ruler provided to measure the length and width of the picture to the nearest inch.

Which measurement is closest to the area of the picture in square inches?

- A. 7 square inches
- B. 10 square inches
- C. 14 square inches
- D. 24 square inches



26. Chloe is building a fence around a square playground. Each side of the playground is 32 yards long.

What is the perimeter of the playground in yards?

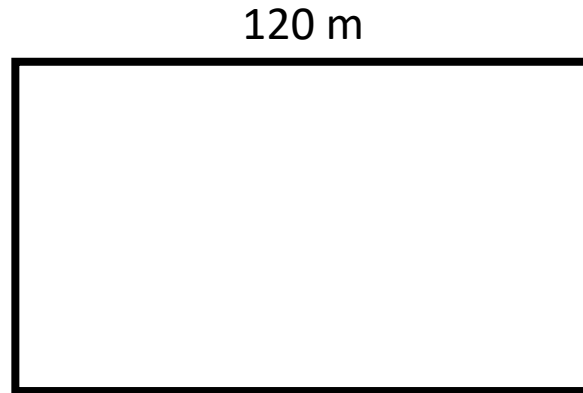
27. Maria had a rectangular tarpaulin that was 60 inches long and 84 inches wide. She cut it in half. What is the area of each half in square inches?

- A. 144 square inches
- B. 288 square inches
- C. 2,520 square inches
- D. 5,040 square inches

28. The top of a bookshelf is 10 inches wide. It is 4 times longer than it is wide. What is the perimeter of the top of the bookshelf in inches?

- A. 60 inches
- B. 40 inches
- C. 80 inches
- D. 100 inches

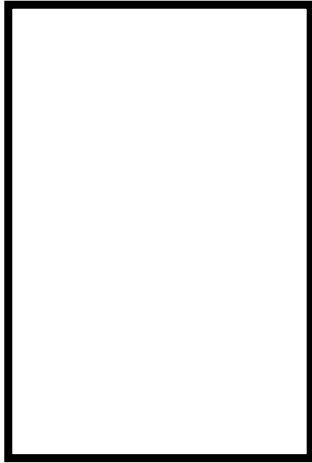
29. The model shows a rectangular field with a length of 120 m. The perimeter of the field is 400 m.



What is the width of the field in meters?

- A. 200 m
- B. 80 m
- C. 280 m
- D. 60 m

30. Use the ruler provided to measure the length and width of each rectangle to the nearest centimeter.



What is the difference between the perimeters of these rectangles in centimeters?

- A. 2 cm, because  $14 - 12 = 2$
- B. 4 cm, because  $6 - 2 = 4$
- C. 6 cm, because  $20 - 14 = 6$
- D. 14 cm, because  $24 - 10 = 14$