

**TEST NAME: 7th Grade Math Review**  
**TEST ID: 847798**  
**GRADE: 07 - Seventh Grade**  
**SUBJECT: Mathematics**  
**TEST CATEGORY: School Assessment**

Student: \_\_\_\_\_

Class: \_\_\_\_\_

Date: \_\_\_\_\_

1. Which expression is equivalent to  $5.5x + 1 - (1.5x + 17)$ ?

- A.  $4x + 18$
- B.  $4x - 16$
- C.  $8x - 18$
- D.  $8x + 16$

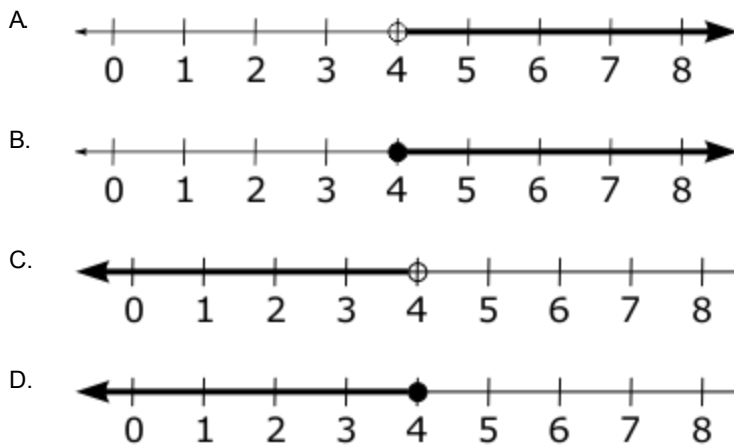
2. A debate team participated in three debate tournaments this season.

- During the first tournament,  $\frac{3}{5}$  of the students on the team won their individual debates.
- During the second tournament, 42% won their individual debates.
- During the third tournament, a greater percent won their individual debates than in the second tournament, but this was a smaller percent than in the first tournament.

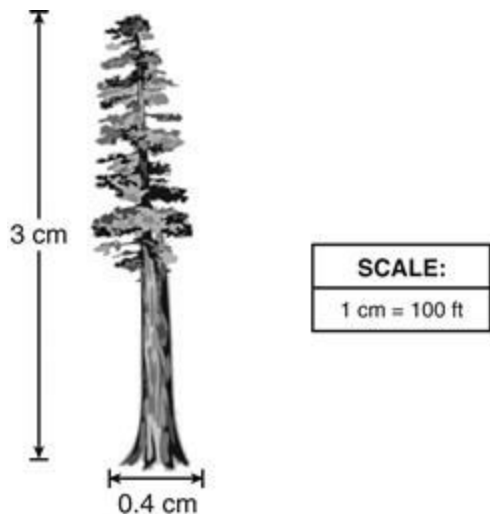
Which percent could represent the portion of the team who won their individual debates in the third tournament?

- A. 21%
- B. 36%
- C. 58%
- D. 62%

3. Which line graph shows the solution for  $3x + 2 \leq 14$ ?



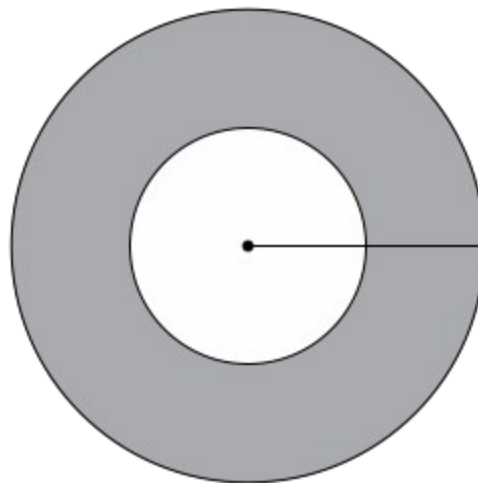
4. A rectangular photograph measuring 2 inches by 4 inches is enlarged by a scale factor of 8. What are the dimensions of the new photograph?
- A. 10 inches by 12 inches
  - B. 16 inches by 12 inches
  - C. 16 inches by 32 inches
  - D. 32 inches by 64 inches
5. While on a camping trip, James made a sketch of a sequoia tree. He used a scale of  $1 \text{ cm} = 100 \text{ ft}$ .



If the width of the trunk of the tree was 0.4 centimeter on James's sketch, what is the actual width of the tree, in feet?

- A. 25
  - B. 40
  - C. 250
  - D. 400
6. Which three angle measures would **not** be possible in a triangle?
- A.  $25^\circ$ ,  $50^\circ$ ,  $105^\circ$
  - B.  $40^\circ$ ,  $65^\circ$ ,  $75^\circ$
  - C.  $45^\circ$ ,  $45^\circ$ ,  $90^\circ$
  - D.  $50^\circ$ ,  $65^\circ$ ,  $80^\circ$

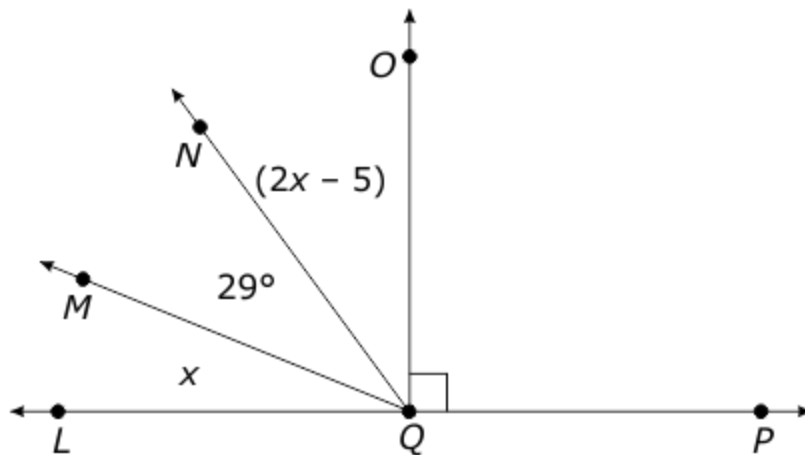
7. Which set of side lengths would form a triangle?
- A. 1.12 in., 1.25 in., 2.55 in.
  - B. 1.13 in., 1.40 in., 2.55 in.
  - C. 1.14 in., 1.41 in., 2.55 in.
  - D. 1.15 in., 1.45 in., 2.55 in.
8. The radius of the larger circle is 5 meters. The radius of the smaller circle is 2.5 meters.



What is the **approximate** area of the shaded region of the larger circle?

- A. 5 meters<sup>2</sup>
  - B. 20 meters<sup>2</sup>
  - C. 59 meters<sup>2</sup>
  - D. 79 meters<sup>2</sup>
9. **Mrs. Lubek exercises her horse by walking him around a circular track. The distance from the edge of the track to the center of the circle is 150 ft. If Mrs. Lubek walks her horse 4 times around the track, approximately how many feet will she and the horse travel? (Use  $\pi = 3.14$ .)**
- A. 471 ft
  - B. 942 ft
  - C. 1884 ft
  - D. 3768 ft

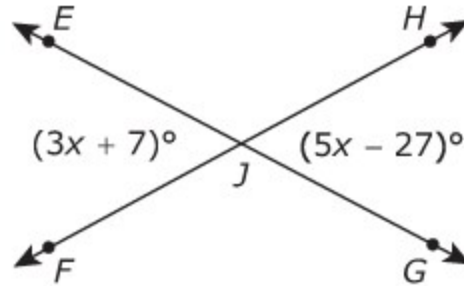
10. In the figure below,  $\angle OQP$  is a right angle.



What is the measurement of  $\angle LQM$ ?

- A.  $19^\circ$
- B.  $22^\circ$
- C.  $31^\circ$
- D.  $38^\circ$

11. In this figure, line  $EG$  intersects line  $FH$  at point  $J$ .



What is the measure of  $\angle EJF$ ?

- A.  $17^\circ$   
B.  $37^\circ$   
C.  $58^\circ$   
D.  $82^\circ$
12. John has  $1\frac{1}{4}$  acres of land. It takes  $80\frac{1}{2}$  pounds of fertilizer to cover one acre. How much fertilizer does John need to cover his land?  
A. 64.4 pounds  
B. 81.125 pounds  
C. 100 pounds  
D. 100.625 pounds
13. Shanika has a part-time job. She budgeted  $\frac{1}{4}$  of her earnings for clothes,  $\frac{1}{5}$  of her earnings for entertainment,  $\frac{1}{8}$  for presents, and the rest she plans to save. What percentage of her earnings has Shanika planned to save?  
A. 17%  
B. 42.5%  
C. 57.5%  
D. 83%

14. John is painting a box that is shaped like a cube. One-eighth of a bottle of paint covers  $\frac{3}{4}$  of one face of the box. How many bottles of paint will John need to paint the entire box?

- A.  $\frac{1}{6}$   
B.  $\frac{9}{16}$   
C. 1  
D. 6

15. What is the constant of proportionality for the table below?

| $x$ | $y$ |
|-----|-----|
| -10 | 25  |
| -8  | 20  |
| -4  | 10  |
| 2   | -5  |

- A. 5  
B. 2.5  
C. -2.5  
D. -5
16. Arnold has a picture frame with a width of 8 inches and a height of 6 inches. Which proportion could be used to calculate the dimensions of a smaller frame with a width of 5 inches, that is similar to the larger one?

- A.  $\frac{8}{6} = \frac{5}{x}$   
B.  $\frac{8}{6} = \frac{x}{5}$   
C.  $\frac{6}{5} = \frac{x}{8}$   
D.  $\frac{8}{x} = \frac{5}{6}$

17. Alex wants to buy a shirt that costs \$35.00.

- The store is having a 30%-off sale.
- The sales tax for clothing is 6%.

How much will Alex pay for the shirt?

- A. \$37.10
- B. \$25.97
- C. \$24.50
- D. \$11.13

18. Dennis measured the width of the space he has in his kitchen to fit a new refrigerator at 37 inches. The actual width is 36 inches. What is the **approximate** percent error?

- A. 0.3%
- B. 1.0%
- C. 2.8%
- D. 3.6%