

Algebra II Practice Quiz 2.2**Short Answer**

1. (5 points) Solve the proportion $\frac{4}{8} = \frac{x}{16}$.

2. (5 points) A high school stadium can seat about 80% of the students attending the high school. If there are 405 students enrolled in the high school, how many students can the stadium seat? If necessary, round to the nearest number of students.

3. (5 points) Lydia is training for the half marathon, a 13-mile-long race. This morning she ran 8 miles in 58 minutes. Assuming she can maintain this pace, how long will it take her to run the half marathon? Round your answer to the nearest minute.

4. (5 points) $\triangle ABC$ has vertices $A(0,0)$, $B(10,0)$, and $C(10,14)$. $\triangle ADF$ is similar to $\triangle ABC$ with a vertex at $D(5,0)$. Graph $\triangle ABC$ and $\triangle ADF$ on the same grid.

5. (5 points) A sawyer (person who cuts down trees) wants to know the height of a tree. The sawyer measures the shadow of his friend, who is 5 feet tall and standing beside the tree, and measures the shadow of the tree. If his friend's shadow is 12 feet long and the tree's shadow is 60 feet long, how tall is the tree?

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Answer Section

SHORT ANSWER

1. ANS:

$$x = 8$$

PTS: 5

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2. ANS:

324 students

PTS: 5

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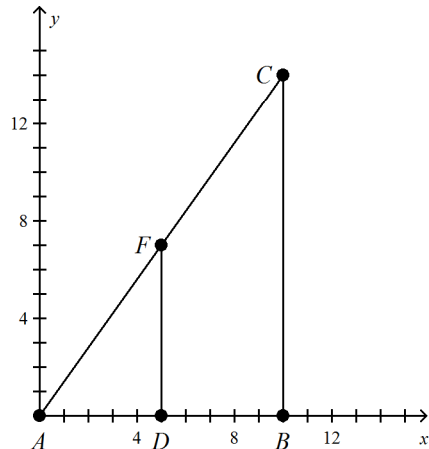
3. ANS:

94 min

PTS: 5

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4. ANS:



PTS: 5

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5. ANS:

25 feet

PTS: 5

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