

Math 3 Advanced

Unit 4 Quiz (practice test)

1. Which of the following could NOT be the three sides of a triangle?
 - a) 4, 9, 12
 - b) 3, 6, 7
 - c) 11, 20, 29
 - d) 5, 9, 15
2. In parallelogram $ABCD$, angle A has a measure of $10x - 6$ and angle C has a measure of $7x + 12$. What is the measure of angle B (in degrees, so you have to solve for x)?
3. A rectangle has a length that is six more than its width. If its perimeter equals 32, what is the width?
4. The diagonals of a rhombus have lengths of 12 and 16. How long is one side of the rhombus?
5. Triangle ABC is similar to triangle TUV . If $AC = 3$, $BC = 9$, and $TU = 45$, what is the length of UV ?
6. Find the coordinates of point P that divides segment AB into a 6 to 2 ratio.
 $A(-6, 3)$; $B(18, 11)$
7. A right triangle has the following legs: $AC = 12$ and $BC = 9$. What is the tangent of angle B ?
8. A 30-60-90 triangle has a long leg with a length of 20. How long is the hypotenuse?
9. A ramp has a horizontal length of 18 and a height of 3. What is the trigonometric expression solved for the angle that the ramp makes with the ground?
10. A ramp has a height of 7 and makes a 12° angle with the ground. What is the trigonometric expression solved for the slant length of the ramp?