

Practice Worksheet

Content Standard: Solve Equations & Inequalities

Student Learning Expectations: Solve equations involving: integers & fractions, ratios & proportions, simple absolute value, real-world applications and open-ended questions.

1. How long would it take to travel from Little Rock, AR, to Nashville, TN, a distance of 355 miles, if you drove at an average speed of 65 mph?  
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2. Solve this equation for x:  $-12 = \frac{2}{3}x - 5$   
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3. Bernice has a bag of candies. In the bag, there are 16 red candies, 5 blue candies, 12 yellow candies, and 7 green candies. What is the probability that Bernice picks either a red or a blue candy?  
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4. Solve for x:  $\frac{4}{x} = \frac{2}{5}$   
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5. The sum of the measures of two angles is  $180^\circ$ . One angle measures  $30^\circ$  more than the other. What are the measures of the angles?  
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6. John is on a 7-hour flight from Atlanta to Seattle. After  $2\frac{1}{2}$  hours, the pilot announces they are over Kansas City, Missouri, a distance of 750 miles from Atlanta. If they travel at the same speed for the rest of the trip, what is the distance between Atlanta and Seattle?  
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7. Solve for x:  $-4x = -2(x + 3)$ .  
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8. The formula  $F = \frac{9}{5}C + 32$  is used to convert Celsius temperature (C ) to Fahrenheit temperature (F). If the Celsius temperature is  $-10^\circ$ , what is the corresponding Fahrenheit temperature?  
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9. A science class conducted an experiment in which a solution with a boiling point of  $112^\circ$  F was left in a car on a sunny day. At 8:00 A.M., the temperature was  $84^\circ$  F. The class found the temperature increased  $8^\circ$  F per hour. At what time would the solution reach the boiling point?  
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10. A school bus took  $2\frac{3}{4}$  hours to drive to the nearest amusement park located 135 miles away. What was the approximate rate at which the bus traveled?  
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