

Section 1.5 Worksheet
Ratio and Proportion

Name _____

Write each of the following ratios in fractional form and reduce to lowest terms.

1. 12 ft to 2 yd _____ 3. 2 lb to 20 oz. _____
2. 5 feet to 72 inches _____ 4. 60 cm to 1 meter _____

Calculate the unit rates for each of the following:

5. 160 miles in 2.5 hours _____
6. 330 miles on 16 gallons of gas _____
7. 2500 bushels of corn on 65 acres of land _____

Solve the following proportions:

8. $\frac{2}{5} = \frac{6}{x}$ _____ 10. $\frac{d+5}{3} = \frac{d+11}{7}$ _____
9. $\frac{3x}{5} = \frac{120}{75}$ _____ 11. $\frac{3x}{3x-6} = \frac{2}{3}$ _____

12. A steel rod is 4.25 ft long and weighs 24.65 lb. How long is a piece of a rod of the same material if its weight is 31.9 lb?

13. A boy 5'6" tall measures his shadow and finds it to be 6'0" long. At the same time, a tree he wishes to measure casts a shadow 50'0" long. How tall is the tree?

14. A 4.5 in diameter ball weighs 17oz. How much would an 11in diameter ball of the same material weigh?

15. A car that sold for \$7200 had a sales tax of \$240. How much is the tax on a car that sells for \$9000?

16. A pump can fill a 2400-liter water tank in 50 minutes. How much water can it pump in half an hour?

17. Cars used in both Canada and the US have speedometers with kilometers per hour as well as miles per hour. If 50 mph is the same speed as 80 kph, what is the speed limit in miles per hour if it is posted on a road in Canada as 90 kph?

18. Two slices of bacon have 85 calories. How many calories are in 7 slices?

19. If 5 gallons of gas cost \$10.26, how much would 15 gallons cost?

20. If a carpet cleaning service charges \$55.00 to clean two rooms, how much would it cost to clean 5 rooms of similar size?