In Exercises 1 and 2, write a proportion to find how many strikes a bowler needs ) get the given score.

- 1. 32 strike attempts; strike score of 75%
- 2. 80 strike attempts; strike score of 95%
- 3. Describe and correct the error in writing the proportion to the right. Jugnts are switched

of referees r for 128 players.

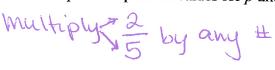
**4.** There are 3 referees for every 16 players. Write a proportion that gives the number

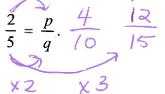
3R	=	XR
16 p		128 p

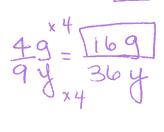
X		Day 1	Day 2
	Length	3.1	15.5
	Height	h	45

Solve the proportion. Use ARROWS. Show your work.

- 11. A recipe calls for  $\frac{3}{4}$  cup of sugar and  $\frac{1}{2}$  cup of brown sugar. You are reducing the recipe. You will use  $\frac{1}{6}$  cup of brown sugar. How much sugar will you use? Both ingredients = by 3.
- 13. There are 32 students in the school play. The ratio of girls to all students in the play is 5:8. How many girls are in the play?
- 14. Two out of three vehicles in a parking lot are SUVs. There are 18 SUVs in the parking lot. How many vehicles are in the parking lot?
- 11. A paint color requires the ratio of green paint to yellow paint to be 4:9. A container of this paint has 36 pints of yellow paint. Write and solve a proportion that gives the number g of pints of green paint in the container.
  - Give two possible pairs of values for p and q:  $\frac{2}{5} = \frac{p}{q}$ . Hultiply  $\frac{2}{5}$  by any  $\frac{4}{5}$







Simplify, divide, cl Tell whether the ratios form a proportion.	recle cross	products
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4	25 65	V )D
	16' 56	100

2. 
$$\frac{30}{75}, \frac{24}{60}$$
 Les

**2.** 
$$\frac{30}{75}, \frac{24}{60}$$
 Les **3.**  $\frac{27}{48}, \frac{108}{192}$  Les

7. 
$$\frac{28.5}{42}$$
,  $\frac{19}{28}$  Yes

7. 
$$\frac{28.5}{42}$$
,  $\frac{19}{28}$  Yes 8.  $\frac{3.5}{4}$ ,  $\frac{11.9}{13.6}$  Yes 9.  $\frac{124}{98}$ ,  $\frac{315}{225}$ 

**9.** 
$$\frac{124}{98}$$
,  $\frac{315}{225}$ 

Tell whether the two rates form a proportion.

Are any of the cost rates proportional? Explain.



Find the value of x so that the ratios form a proportion.

**10.** 8 feet in 15 seconds; 24 feet in x seconds 
$$x = 45$$

11. 28 people in 4 rooms; 63 people in x rooms 
$$x =$$

12. 14 girls to 6 boys; x girls to 15 boys 
$$x = 35$$

13. 45 marbles in 9 bags; x marbles in 36 bags 
$$x = 180$$

$$36/8ch = 94.50$$

yes, Both vates are equal -> Proportional. 19. You can buy 4 tickets for \$75 or 5 tickets for \$94. Are the costs proportional? If not, rewrite one of the rates so the costs are proportional.

\$93.75 for 5 would work

20. A recipe requires a ratio of 4 potatoes to 6 carrots. You accidentally use 5 potatoes with 6 carrots. What is the least number of potatoes and carrots that you can add to get the correct ratio of potatoes to carrots?

