

Name: _____

6th Grade Math

Block : _____

Unit 5 Pre-Assessment

Indicator 15

There are 90 students in a school play. The ratio of boys to girls is 4:5.

1. How many boys are in the school play? _____
2. How many girls are in the school play? _____
3. On a chicken farm, the ratio of wings to beaks is 2:1. Describe what this ratio means.
4. An assembly line made 18 robots with red eyes and 24 robots with blue eyes. What is the ratio of blue-eyed robots to red-eyed robots?
5. Katie's Cake Shop made 13 chocolate cakes and 17 vanilla cakes. What is the ratio of the number of vanilla cakes to all the cakes?

Indicator 16

For each of the following examples, write as a **unit rate**.

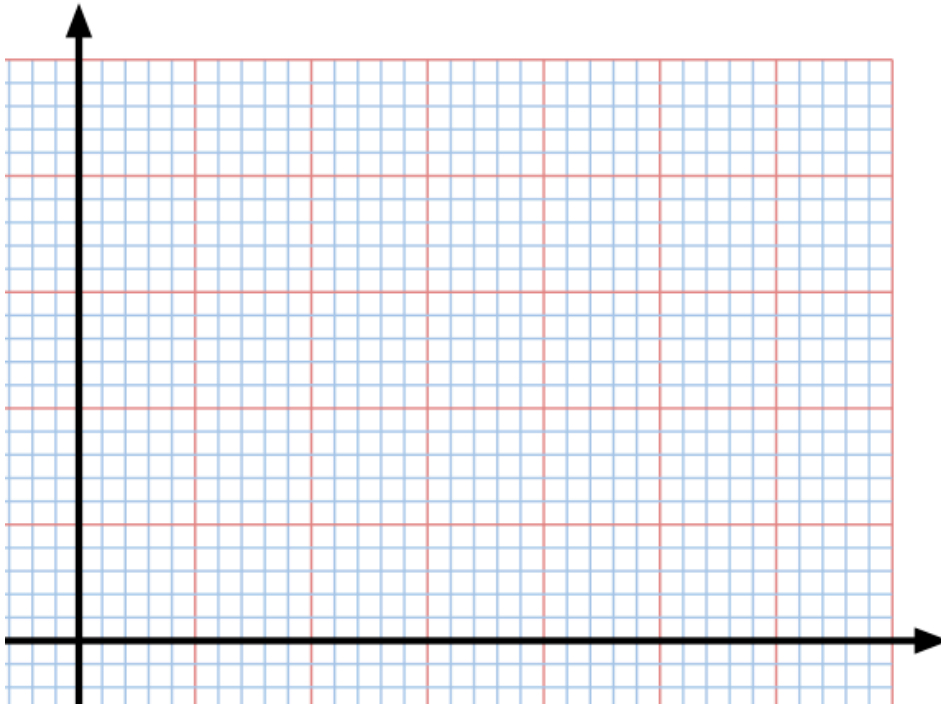
6. 5 concert tickets for \$90
7. 136 calories in 16 Cheez-It crackers
8. Car A drives 225 miles using 15 gallons of gas. Car B drives 204 miles using 12 gallons of gas. Which car gets the better gas mileage? Explain how you found your answer.
9. Certain spaceships can travel 18,000 miles per hour. Find the unit rate of miles per minute for this spaceship. Show your thinking.
10. You can pay 0.70 cents for a can of soda at school or pay \$4.80 for a 12-pack at the store. How much would you save per can by purchasing 12 at a time at the store instead of 1 at a time at the school?

Indicator 17

Asha found that 6 cars passed her house in 5 minutes. Using this rate, she made a partially complete ratio table to show the relationship between time and number of cars.

Cars	6	12	18		30
Minutes	5	10	15	20	

11. Complete the table.
12. Graph the ratios represented in the table on the coordinate plane.



13. At this rate, how many cars will Asha expect to see during 3 hours?
14. At this rate, how many cars will Asha expect to see during $2\frac{1}{2}$ minutes?
15. At this rate, how many cars will Asha expect to see during a day?

Indicator 18

- 16. Convert 550 miles to yards. (1,760 yard = 1 mile)
- 17. How many miles are in 1760 feet? (5,280 feet = 1 mile)
- 18. Convert 17 quarts to gallons. (4 quarts = 1 gallon)
- 19. How many pounds are in 640 ounces? (16 ounces = 1 pound)
- 20. Convert 5,500 milliliters to liters. (1000 milliliters = 1 liter)

Indicator 19

For questions, 21-23 use the table below that shows the results of a class poll.

Question	Yes	No
Do you walk to school?	18%	82%
Is there a pet in your home?	$\frac{14}{25}$	$\frac{11}{25}$
Do you play on a sports team?	0.42	0.58

- 21. Which fraction, decimal, or percent in the table shows the least portion of the class?
- 22. Which is less, the number of students with a pet or the number who play on a sports team?
- 23. $\frac{11}{50}$ of the students live within $\frac{1}{2}$ mile of the school. Is this greater than or less than the portion of students who walk to school?
- 24. Thursday afternoon between 4:00 and 5:00 you spend $\frac{1}{4}$ of the hour reading email, 0.4 of the hour doing homework, and 35% of the hour doing chores. Write the tasks in order from least amount of time to greatest.
- 25. Could 75% of the class walk to school and 30% not walk to school? Explain.

Indicator 20

- 26. What is 52% of 85?
- 27. Of the 550 students at Swiftstream Elementary school, 72% of the students ride the bus. How many students ride the bus?
- 28. Fifteen baseball players arrived early to practice. This was 60% of the team. How many players were on the team?

29. Mrs. Halvorson left a \$6.30 tip at a restaurant. This represented 18% of her bill. What was the amount of the bill?

30. Sam is cleaning 15 coins of his 20 coin collection. What percent of his collection is he cleaning?

Indicator 15	
1.	_____
2.	_____
3.	_____
4.	_____
5.	_____

Indicator 16	
6.	_____
7.	_____
8.	_____
9.	_____
10.	_____

Indicator 17	
11.	_____
12.	<u>graph above</u>
13.	_____
14.	_____
15.	_____

Indicator 18	
16.	_____
17.	_____
18.	_____
19.	_____
20.	_____

Indicator 19	
21.	_____
22.	_____
23.	_____
24.	_____
25.	_____

Indicator 20	
26.	_____
27.	_____
28.	_____
29.	_____
30.	_____