



Quarter 1 Exam Review BALLOON POP!

Unit 1 (Day 2)
In-Class
Review

Directions: After you complete a problem, have one person from your pod collect all four worksheets. Send that person up to check in with me. Got it right? You get to pop another group's balloon. Missed something? Go back and fix your mistake. The group with the most balloons at the end of class wins!

1. What number group(s) does $\frac{-1}{7}$ belong to?

1. rational
(& real)

2. A tee shirt that originally costs \$56.50 is on sale for 30% off. How much did you save?

2. \$16.95

3. Simplify: $12 - 7 + 4 \div 4$

$$\begin{array}{r} 12 - 7 + 1 \\ \hline 5 + 1 \end{array}$$

3. 6



4. Solve for x: $8x + 5 - 6x = 1$

$$\begin{array}{r} 2x + 5 = 1 \\ 2x = -4 \end{array}$$

4. $x = -2$

5. Solve for y: $12y = 3x - 72$

$$y = \frac{3x}{12} - \frac{72}{12}$$

5. $y = \frac{1}{4}x - 6$

6. Solve for x: $\frac{2}{7} = \frac{6}{x}$

6. $x = 21$



7. What number group(s) does 0 belong to?

7. whole, integer, rational (real)

8. What number is 20% of 64?

8. 12.8

$$\frac{x}{64} = \frac{20}{100}$$

9. Solve for b: $A = \frac{1}{2}bh$

9. $b = \frac{2A}{h}$

$$\frac{2A}{h} = \frac{bh}{h}$$



10. Solve for x:

$$\frac{7}{x-4} = \frac{1}{5}$$

10. $x = 39$

$$1(x-4) = 35$$

11. Simplify: $\frac{2^3 + 4 \div 1(2-3)}{6 \div 3 \times 2} = \frac{8 + 4 \div 1 \times -1}{2 \times 2} = \frac{8 + 4 \times -1}{4}$

11. 1

$$= \frac{8 + -4}{4}$$

$$= \frac{4}{4}$$

12. Solve for x: $-\frac{1}{2}x + 5 = -3$

12. $x = 16$

$$-\frac{1}{2}x = -8$$

$$x = 16$$



13. Solve for x: $20 + x = -17x - 5 + 13x$

13. $x = -5$

$$20 + x = -4x - 5$$

$$5x = -25$$

$$x = -5$$

14. Solve for x: $\frac{2x-1}{12} = \frac{3}{9}$

$$9(2x-1) = 36$$

$$18x - 9 = 36$$

$$18x = 45$$

$$x = 2.5$$

14. $x = \frac{5}{2}$ or 2.5

15. Cubs tickets are 15% off. If one ticket costs \$139.99, how much did you pay for the discounted ticket?

15. $\$118.99$



16. Solve for y: $-35x - 5y = 15$

$$\frac{-5y}{-5} = \frac{35x + 15}{-5}$$

16. $y = -7x - 3$

17. Simplify: $6 \times 3 - 20 \div 5$

$$18 - 4$$

$$14$$

17. 14

18. What number group(s) does -183 belong to?

18. integer
rational
real



19. 35 is what percent of 80?

$$\frac{35}{80} = \frac{x}{100}$$

19. 43.75%

20. Simplify: $9(5 - 3)^2$

$$9(2)^2$$

$$9(4)$$

20. 36

21. Solve for x: $6x + 5 = 2(3x - 4)$

$$6x + 5 = 6x - 8$$

$$5 = -8$$

21. \emptyset

