Name _____

Score _____

Cumulative Test 3A

Math Course 3

*Also take **Power-Up Test 3***

1. (7) Flying at an average speed of 580 miles per hour, how far would a plane fly in $2\frac{1}{2}$ hours?

2. (3) At 7 a.m., the temperature was 48°F. By noon the temperature was 63°F. By how many degrees did the temperature increase?

3. (3, 13) A whole pizza is cut into twelfths. If Dexter eats $\frac{1}{2}$ of the pizza and Landry eats $\frac{1}{3}$ of the pizza, then what fraction of the pizza remains?

4. (4) How many quarters total $20?

5. (6, 8) How many square yards of carpet are needed to cover the floor of a room that is 15 feet long and 12 feet wide? (1 yd = 3 ft)

6. (8, 13) What is the perimeter of a rectangular picture frame that is $14\frac{1}{2}$ inches tall and $11\frac{1}{2}$ inches wide?

7. (9) Write the prime factorization of 630.

8. (11) How much money is 30% of $25.00?

9. (10, 12) Arrange in order from least to greatest.

$$0, -1, \frac{1}{2}, 1.2, \frac{4}{3}, 1$$

10. (Inv 1) The coordinates of three vertices of a square are (3, 2), (–1, 2), and (–1, –2). What are the coordinates of the fourth vertex?

11. (10, 13) Compare: $\frac{5}{3}$ ◯ $\frac{9}{16}$

12. (12) Compare: 0.375 ◯ 0.38

13. (14) Find 4*ac* when *a* is 3 and *c* is 5.

For questions 14 and 15, solve by inspection.

14. (14) $2x + 3 = 15$

15. (14) $y - 12 = 7$

For questions 16–19, simplify the expression.

16. (13) $\frac{5}{9} + \frac{1}{3}$

17. (13) $3\frac{5}{8} - 1\frac{1}{2}$

18. (15) $10^2 - \sqrt{100}$

19. (2) $\frac{\$56.84}{14}$

20. (7, 12) Maria liked to comparison shop. She found the price of the item she wanted at five different stores.

$29.85, $28.95, $32.99, $29.89, $26.59

What is the median of these prices?

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1. 580 × 2.5 = 1450 miles

2. 56°F − 48°F = 15°F

3. $\frac{1}{2}$ of 12 = 6 pieces
mult. $\frac{1}{3}$ of 12 = 4 pieces (divide)
10 pieces
$\frac{2}{12}$ left = $\frac{1}{6}$

4. -- 4 quarters in $1
-- we have $20
4 × 20 = 80 quarters

5. 15 ft ÷3 → 5 yds × 12 ft ÷3 → 4 yds = 20 yds² -- but we need yds!

6. P = add all sides
$14\frac{1}{2} + 14\frac{1}{2} + 11\frac{1}{2} + 11\frac{1}{2}$
14.5 + 14.5 + 11.5 + 11.5 = 52 in.

7. 630
63 × 10
7 × 9 × 2 × 5
3 × 3
630 = 2·3·3·5·7
or
630 = 2·3²·5·7

8. 30% of $25
mult. $\frac{30}{100}$ of 25 (divide)
25 ÷ 100 = .25
.25 × 30 = $7.50

9. 0, -1, $\frac{1}{2}$, 1.2, $\frac{4}{3}$, 1
$\frac{1}{2}$ → 0.5; $\frac{4}{3}$ → 1.3
least → greatest
-1, 0, $\frac{1}{2}$, 1, 1.2, $\frac{4}{3}$

10. (3, -2)

11. $\frac{5}{3}$ = 1.6; $\frac{9}{16}$ = 0.5625
$\frac{5}{3}$ 0 $\frac{9}{16}$
$\frac{5}{3}$ 7 $\frac{9}{16}$

12. 0.375 < 0.380

13. 4ac when a is 3, c is 5
4 · 3 · 5 =
12 · 5 = 60

14. 2x + 3 = 15
(12) + 3 = 15
2 · 6 = 12, so x = 6

15. y − 12 = 7
12 + 7
19

16. $\frac{5}{9} \xrightarrow{\times 1} \frac{5}{9}$
$+\frac{1}{3} \xrightarrow{\times 3} \frac{3}{9}$
8/9
3 | 3 9
1 3
3 · 1 · 3 = 9
LCM = 9

17. $3\frac{5}{8} - 1\frac{1}{2}$
$\frac{29}{8} - \frac{3}{2}$
$\frac{29}{8} = \frac{29}{8}$
$-\frac{3}{2} \xrightarrow{\times 4} \frac{12}{8}$
$2\frac{1}{8}$ or $\frac{17}{8}$

18. $10^2 - \sqrt{100}$
100 − 10 = 90

19. $\frac{\$56.84}{14}$ = $4.06
DIVIDE

20. Put in order, then find middle #
$26.59, $28.95, $29.85, $29.89, $32.
$29.85