

Semester 1 Exam Review - Part 5

Fraction Operations

↓ ~~end result~~

1) Jonah practices cello for $2\frac{1}{2}$ hours each week. If he practices for a total of 35 hours, write an expression that can be used to determine the number of weeks he practiced?

$35 \div 2\frac{1}{2}$

2) George is using a board $1\frac{1}{8}$ yard long for a school project. If he cuts off a piece that is $\frac{1}{2}$ yard long, what fraction of the board is left?

* borrow - give it back!! $1\frac{1}{8} - \frac{1}{2} = \frac{5}{8}$

$1\frac{1}{8} - \frac{1}{2} = \frac{9}{8} - \frac{4}{8} = \frac{5}{8}$

3) JBMS is building a sidewalk. The workers use $\frac{2}{3}$ bag of cement to make one sidewalk square. How many bags of cement would be needed to make $7\frac{1}{2}$ sidewalk squares?

* NO multiplying w/ mixed #!

square \rightarrow squares

$7\frac{1}{2} \times \frac{2}{3} = 15 \times \frac{2}{3} = 10$

4) Taylor painted $\frac{1}{2}$ of the fence and Stephanie painted $\frac{1}{3}$ of the fence.

Which picture is shaded to represent the total amount of the fence that was painted?



$\frac{1}{2} + \frac{1}{3} = \frac{2}{6} + \frac{2}{6} = \frac{4}{6} = \frac{2}{3}$

5) $\frac{3}{8} + \frac{3}{4} = 1\frac{1}{8}$

6) $\frac{9}{10} - \frac{3}{4} = \frac{3}{20}$

7) $7\frac{1}{10} - \frac{1}{5} = 6\frac{9}{10}$

8) $5\frac{5}{6} - 1\frac{2}{3} = 4\frac{1}{6}$

9) $7\frac{3}{4} + 2\frac{1}{4} = 10$

10) $3\frac{5}{6} + 1\frac{2}{3} = 5\frac{1}{2}$

seperate sheet

11) Kendall talked on the phone for $\frac{5}{12}$ hour on Saturday, $2\frac{5}{8}$ hour on Sunday and $\frac{3}{4}$ hour on Monday. How much longer did she talk on Sunday than on Monday?

$2\frac{5}{8} - \frac{3}{4} = 1\frac{7}{8}$

12) Jameeka works at a grocery store. She has $8\frac{1}{4}$ pounds of beans that she is putting in bags. If each bag holds $\frac{3}{4}$ pound of beans, how many bags of beans will she be able to make?

$8\frac{1}{4} \div \frac{3}{4} = 11\text{ bags}$

Evaluate if $a = \frac{7}{8}$, $b = \frac{1}{2}$, $c = \frac{1}{4}$, $d = 1\frac{1}{8}$

13) $b^2 - c$

$\frac{1}{4}$

14) $dc + a$

$1\frac{5}{32}$

15) $c(a - b)$

$\frac{3}{32}$

16) A batch of brownies requires $1\frac{1}{2}$ cups of sugar. How many batches can Jessi make with $7\frac{1}{2}$ cups of sugar?

$7\frac{1}{2} \div 1\frac{1}{2} = 5$

PART 5

Fraction ops

$$5. \quad \frac{3}{8} + \frac{3}{4} = \frac{3}{8}$$

*vertically
add!

$$+ \frac{\cancel{3}}{\cancel{4}} = \frac{6}{8}$$

$$\frac{9}{8} = \left(\frac{1}{8} \right)$$

$$6. \quad \frac{9}{10} - \frac{3}{4} = \frac{18}{20}$$

$$- \frac{\cancel{3}}{\cancel{4}} = \frac{15}{20}$$

$$\left(\frac{3}{20} \right)$$

$$7. \quad 7\frac{1}{10} - \frac{1}{5} = 6\frac{1}{10} + \frac{10}{10} = 6\frac{11}{10}$$

$$- \frac{\cancel{1}}{\cancel{5}} = \frac{2}{10}$$

$$\left(6\frac{9}{10} \right)$$

$$8. \quad \begin{array}{r} 5\bar{5} \\ 6 \\ - 1\bar{2} = \frac{4}{6} \\ \hline 4\frac{1}{6} \end{array}$$

$$9. \quad \begin{array}{r} 7\frac{3}{4} \\ + 2\frac{1}{4} \\ \hline 9\frac{4}{4} = 10 \end{array}$$

$$10. \quad \begin{array}{r} 3\bar{5} \\ 6 \\ + 1\bar{2} = \frac{4}{6} \\ \hline 4\frac{9}{6} = 4 + 1\frac{3}{6} = 5\frac{3}{6} = 5\frac{1}{2} \end{array}$$

$$11. \quad \begin{array}{r} 2\bar{5} + \frac{5}{8} = 1\frac{13}{8} \\ - \frac{6}{8} = \frac{6}{8} \\ \hline 1\frac{7}{8} \end{array}$$

$$12. \quad \begin{array}{r} 8\frac{1}{4} \div \frac{3}{4} \\ \hline 11\frac{3}{4} \div \frac{3}{4} = 11 \end{array}$$

11 bags

$$13. b^2 - c$$

$$\frac{1}{2} \times \frac{1}{2} - \frac{1}{4}$$

$$\frac{1}{4} - \frac{1}{4}$$

$$\textcircled{0}$$

$$15. d(a-b)$$

$$\frac{1}{4} \left(\frac{7}{8} - \frac{1}{2} \right)$$

$$\frac{7}{8}$$

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

$$\frac{1}{4} \cdot \frac{3}{8} = \textcircled{\frac{3}{32}}$$

$$d0 + a$$

$$14. \frac{1}{8} \cdot \frac{1}{4} + \frac{7}{8}$$

$$\frac{9}{8} = \frac{1}{4}$$

$$\frac{9}{32} + \frac{28}{32}$$

$$\frac{37}{32} = \textcircled{\frac{5}{32}}$$

$$16. 7 \frac{1}{2} \div \frac{1}{2}$$

$$\frac{15}{2} \div \frac{3}{2}$$

$$\frac{5 \cancel{15} \cdot \cancel{2}}{\cancel{12} \cdot \cancel{1}} = \textcircled{5}$$

Semester 1 Exam Review - Part 6

Integers

1) Which expression does NOT give the same result as -5×-4 ?

A) 4×5
20

B) $-40 \div 2$
-20

C) $30 + (-10)$
20

D) $-20 + (-140)$
20 * KCC! *

$(-) = (-) = (+)$

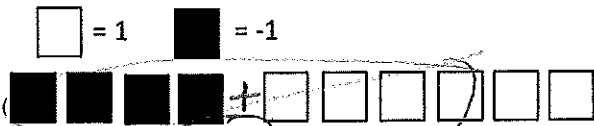
2) Suppose the temperature was 76°F at 7:00 A.M. If the temperature increases 2° each hour what will the temperature be 5 hours later?

$76 + (+2 \cdot 5) = 86^\circ\text{F}$

3) Maris had -100 points in Jeopardy, then got a 500 point question correct. What is her new score?

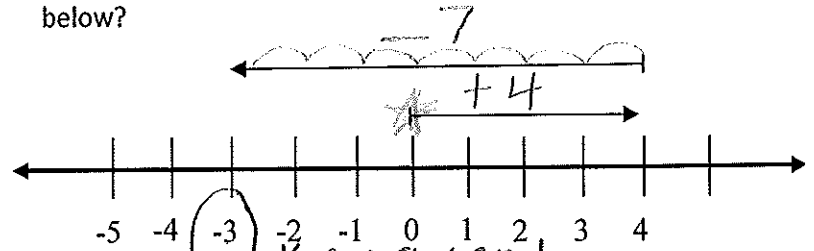
$-100 + 500 = 400$

4) Solve the expression represented by the model below.



- A -2
- B 2
- C 10
- D -10

5) Which expression is represented for the model below?



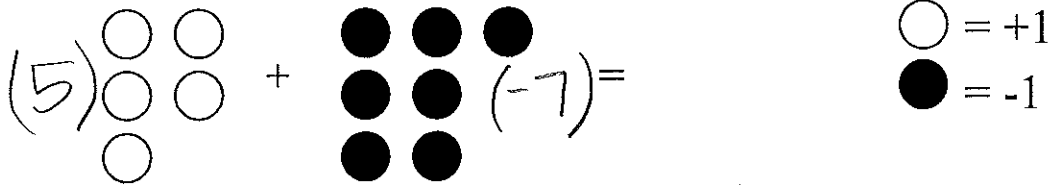
- A $(-3) + 4$
- B $-3 + 9$

- C $4 + (-7)$
- D $4 - (-3)$

6) Mrs. Van lost money on an investment at a rate of \$4 per day. How much did she lose after two weeks?

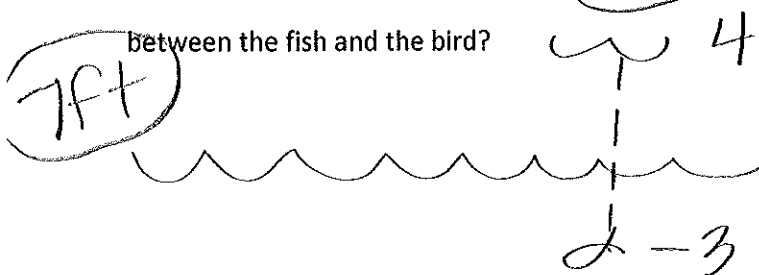
$14 \cdot (-4) = -56$

7) Use the model below to select the problem situation that fits with the model.



- A. Steven has seven toy cars and five of them broke. $7 + (-5)$
- B. Lauren has five roses and Simon gave her seven more. $5 + 12$
- C. Chris has five dollars and he had to borrow seven dollars from his mom. $5 + (-7)$
- D. Quinton is twelve years old and her younger brother is seven years younger than her. $12 + (-7)$

8) A fish is a 3 feet below the water and a bird is at 4 feet above the water. What is the distance between the fish and the bird?



9) $|-8| + |6|$

$8 + 6 = 14$

10) $48 \div (-6)$

-8

11) $(-48) \div (-6)$

8

12) $\frac{15}{-3}$

-5