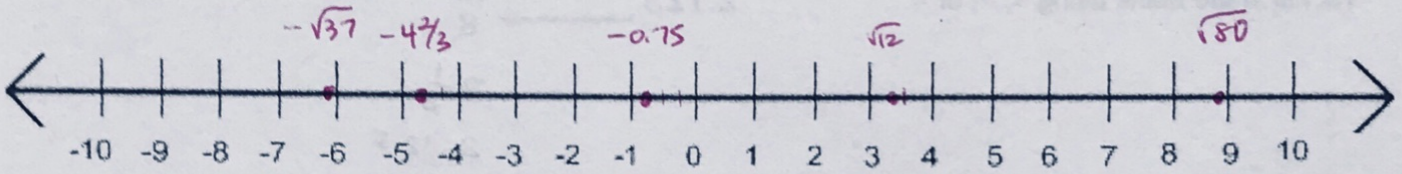
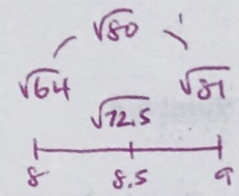
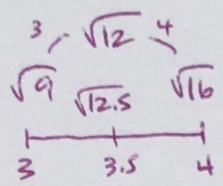
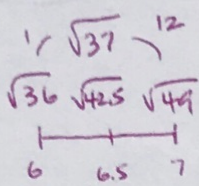


Unit 0 Study Guide

Number Lines

1. Mark and label the following numbers on the number line below: $-4\frac{2}{3}$, $-\sqrt{37}$, $\sqrt{12}$, $\sqrt{80}$, and -0.75

≈ -6.1 ≈ 3.4 ≈ 8.9



Fraction Operations

Perform the following operations:

2. $2\frac{7}{12} + 8\frac{1}{3} = 10\frac{11}{12}$

$\frac{7}{12} + \frac{1}{3}$

$\frac{7}{12} + \frac{4}{12} = \frac{11}{12}$

4. $\frac{22}{50} \cdot \frac{6}{15} \cdot \frac{3}{66} = \frac{3}{125}$

$\frac{22}{25} \cdot \frac{2}{5} \cdot \frac{1}{11}$

3. $12\frac{4}{5} - 3\frac{2}{7} = 9\frac{18}{35}$

$\frac{4}{5}$	$\frac{28}{35}$
$-\frac{2}{7}$	$\frac{10}{35}$
	$\frac{18}{35}$

5. $5\frac{7}{9} \div 2\frac{3}{4} = 2\frac{10}{99}$

$\frac{52}{9} \div \frac{11}{4}$

$\frac{52}{9} \cdot \frac{4}{11} = \frac{208}{99}$

$\frac{198}{198}$

Integer Operations

6. $4 - (-9) + 15 = 28$

$4 + 9 + 15 = 28$

7. $|-2| - 32 = -30$

$2 - 32 = -30$

$$8. \frac{-9+6}{12-36}$$

$$\frac{-3}{-24} = \left(\frac{1}{8}\right)$$

$$9. 5[(-7) + (-3)] + 3 =$$

$$5[-10] + 3$$

$$-50 + 3 = \left(-47\right)$$

Compare Numbers

10. Fill in the blank using $<$, $>$, or $=$.

$$2.125 \underline{=} \frac{17}{8}$$

$$2\frac{1}{8}$$

$$2.125$$

11. Fill in the blank using $<$, $>$, or $=$.

$$\frac{3}{5} \underline{<} \frac{73}{99} \approx \frac{73}{100}$$

$$0.6$$

12. Fill in the blank using $<$, $>$, or $=$.

$$12.5 \underline{>} \sqrt{150} \approx 12.2$$

