

Name: Key

1. Simplify the following (remember to deal with the "double signs" and to use the number line if needed):

a) $(-3) + (-4) = \underline{-7}$

b) $(+7) - (-2) = \underline{9}$

c) $(-3) + (-8) = \underline{-11}$

d) $(+25) - (-4) = \underline{29}$

e) $-3 + 18 = \underline{15}$

f) $32 - (-9) = \underline{41}$

g) $1 - (-6) = \underline{7}$

h) $-8 + (-10) = \underline{-18}$

2. Simplify:

a) $(-3)(5)$

$= \underline{-15}$

b) $(-2)(6)(-2)$

$= (-12)(-2)$

$= \underline{24}$

c) $(-5) \times (9) \div (-3)$

$= -45 \div -3$

$= \underline{15}$

d) $(16) + (-4)$

$= \underline{-4}$

e) $(-45) + (-5)$

$= \underline{9}$

f) $-1000 \div -20$

$= \underline{50}$

3. Complete each number statement by writing the correct integer in the blank.

a) $14 + \underline{-19} = -5$

b) $5 \times \underline{-8} = -40$

c) $-81 \div \underline{-9} = 9$

d) $\underline{7} + (-10) = -3$

(d) $\frac{9}{17} \div \frac{12}{17}$

$$= \frac{9^3}{17^1} \times \frac{17^1}{12^4}$$

$$= \frac{3}{4}$$

(e) $3\frac{1}{8} \times 3\frac{3}{5}$

$$= \frac{5^2}{8} \times \frac{18^4}{5^1}$$

$$= \frac{45}{4} = 11\frac{1}{4}$$

(f) $7\frac{2}{4} - 3\frac{5}{8}$

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

$$= 6\frac{12}{8} - 3\frac{5}{8}$$

$$= 3\frac{7}{8}$$

or

$$\frac{60}{8} - \frac{29}{8}$$

$$= \frac{31}{8} = 3\frac{7}{8}$$

9. Simplify:

a) $(-2)^2 \times 2^3 + 5 \times (-1)^2$

$$= 4 \times 8 + 5 \times 1$$

$$= 32 + 5$$

$$= 37$$

b) $\frac{24 + 8 \times (-5)}{19 - 2^2}$

$$= \frac{3 \times (-5)}{19 - 4} = \frac{-15}{15}$$

$$= -1$$

c) $\frac{100 \div (24 - 14)}{[-18 + (-2)] + 10}$

$$= \frac{100 \div 10}{-20 + 10}$$

$$= \frac{10}{-10}$$

$$= -1$$

d) $\frac{4 \times (-16 + 18)^2 \div (-4)}{(4 \div 2) + (-8 \div (-4))}$

$$= \frac{4 \times (2)^2 \div (-4)}{2 + 2}$$

$$= \frac{4 \times 4 \div (-4)}{4}$$

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