Introduction to Integers

Date: Block: Name:

1. Write an integer for each statement

a. A gain of \$15

b. \$200 deposit

c. 29°C below

- d. 10 minutes earlier
- e. 20 kg heavier

f. loss of 10 kg

g. \$67 in debt

h. 40 mm removed

i. rise of 15°C

j. \$40 withdrawal

k. \$10 profit

1. \$5 reduction

m. 25 m longer

n. 5 point penalty

o. 2 floors down

- p. 8 L poured into a bucket
- q. 2 L leaked out

r. 120 m increase in altitude

2. Write the opposite of

a. A loss of \$350

- b. a 150 kg gain in mass
- c. An 80 m loss of altitude

- d. an 6 °C decrease in temperature e. 20 points scored

f. \$20 paid

3. Draw separate number lines and illustrate each set of integers

a. -5 to 8

b. -3 to 9

c. -10°C to 0°C

4. Which integer is greater

a. -18, -25

b. -9,3

c. 0,-7

5. Arrange in order from least to greatest

a. 15, 0, -8, 6, -2

b. -8, -1, 0, -14, 3

c. -9, -5, 11, -8, 4

d. 3, -4, 0, 5, -8

e. -6, 2, -10, -9, 13

f. 5, -8, 0, 7, -2

6. Use the symbols < (less than), > (greater than), or = (equal to) to compare integers

a. -5 __ 5

b. 7 __ 0

c. 13__+13

d. 61___-70

e. -25 ___ -10

f. -8 ___-18

g. -14 ___ - 7

h. 8 ___-15

i. -19 __ 14

j. $-35 _{--} - 12$

k. 0 ___18

1. +21__21

7. Add the following integers.

a.
$$(-8) + (-20) =$$

b.
$$(-24) + (+2) =$$

c.
$$36+(-9)=$$

f.
$$(-8) + 3 =$$

h.
$$(+19+(+16)=$$

i.
$$-30+(+15) = _____$$

n.
$$(-16 + (+8) = _____$$

8. Determine the missing number.

a.
$$_{-}\pm (-5) = 3$$

c.
$$-11+ _{=} -16$$

d.
$$9 + ___ = -3$$

f.
$$-3+$$
 ___ = 0

g.
$$28+$$
 ___ = 12

h.
$$-4+$$
 ___ = -10

m.
$$_{\pm}6 = -5$$

n. ___±
$$(-7) = 2$$

o.
$$_{\pm}-19=-10$$

p.
$$_{\pm}(-4) = -8$$

9. Solve the following Problems

- a. A number increased by 13 is -9. What is the number?
- b. Eight more than a number is 25. Find the number.
- c. Seven greater than a number is 13. Find the number.
- d. Find a number three more than the sum of 4 and -9.
- e. Four more than a number increased by 5 is 12. Find the number.
- f. Find a number nine more than the sum of 13 and 5.

10. Solve the following problems.

- a. A hot air balloon is at a height of 134 m. The pilot increases the height by 46 m. What is the new height?
- b. A Bank account has a \$257 balance. A deposit is made for \$329. What is the new balance?