

Adding Integers

(a) Adding Integers with the same sign

Just add and keep the sign in your answer.

Example: (a) $-11 + (-5) = -16$ (b) $7 + 4 = 11$ (c) $+6 + (+8) = 14$

Use this rule to add the following:

(a) $-14 + -7 =$	(b) $14 + 7 =$
(c) $11 + (+9) =$	(d) $-11 + (-9) =$
(e) $(-10) + (-1) =$	(f) $10 + 1 =$
(g) $(+17) + (+9) =$	(h) $(-17) + (-9) =$
(i) $12 + 8 =$	(j) $-12 + -8 =$

(b) Adding Integers with different signs

Subtract, then write the sign of the bigger absolute value in your answer

Example: (a) $5 + (-11)$

$$11 - 5$$

11 is bigger and it is negative so

$$= -4$$

(b) $8 + (-7)$

$$8 - 7$$

8 is bigger and it is positive so

$$= 1$$

Use this rule to add the following:

(a) $-14 + 7 =$	(b) $14 + (-7) =$
(c) $11 + (-9) =$	(d) $-11 + (+9) =$
(e) $(-10) + (+1) =$	(f) $10 + (-1) =$
(g) $(-17) + (+9) =$	(h) $(+17) + (-9) =$
(i) $12 + (-8) =$	(j) $-12 + 8 =$

Subtracting Integers

Just remember: **KEEP CHANGE CHANGE**

Keep the first number as it is

Change the $-$ sign to a $+$

Change the number after the sign to its opposite

Then use the rules for adding integers

Example: (a) $9 - (-4)$

$$9 + (+4)$$

Use adding same sign rule

$$= 13$$

(b) $-12 - 8$

$$-12 + (-8)$$

Use adding same sign rule

$$= -20$$

(c) $-6 - (-5)$

$$-6 + (+5)$$

Use adding different sign rule

$$6 - 5$$

$$= -1$$

Use these steps to subtract the following:

(a) $-14 - 7 =$	(b) $14 - (-7) =$
(c) $11 - (-9) =$	(d) $-11 - (+9) =$
(e) $(-10) - (+1) =$	(f) $-10 - (-1) =$
(g) $(-17) - (+9) =$	(h) $(-17) - (-9) =$
(i) $-12 - (-8) =$	(j) $-12 - 8 =$

Application:

The temperature in New York was -7°C on Saturday. The temperature went up by 17°C on Sunday and dropped by 6°C on Monday.

What was the temperature on Monday?

