## Adding Integers with Models

| Problem | Sum | With Counters | Number Line |
| :---: | :---: | :---: | :---: |
| 1) $3+(-5)=$ |  |  |  |
| 2) $2+(-8)=$ |  |  | -10-9-8-7-6-5-4-3-2-10+1+2+3+4+5+6+8+8+10 |
| 3) $4+(-4)=$ |  |  |  |
| 4) $(-7)+4=$ |  |  |  |
| 5) $(-6)+5=$ |  |  |  |

What is the algorithm (rule) for adding integers with DIFFERENT signs?

| Problem | Sum | With Counters | Number Line |
| :---: | :---: | :---: | :---: |
| 1) $-5+-2=$ |  |  |  |
| 2) $-2+-3=$ |  |  |  |
| 3) $-2+-4=$ |  |  |  |
| 4) $7+4=$ |  |  |  |
| 5) $-2+-3=$ |  |  |  |

What is the algorithm (rule) for adding integers with the SAME signs?

## More Adding Rational Numbers

## If $a=-3, b=-5$ and $c=5$, find the sum.

1) $c+b$
2) $a+|b|$
3) $|a+b|$
4) $a+b+c$
5) $a+|c+b|$
6) $a+c$

If $x=-10, y=2$ and $z=-1$, find the sum.
7) $x+z$
8) $|z|+x$
9) $|x+y+z|$
10) $z+y$
11) $x+y$
12) $|x+y|+z$

Write an addition expression to describe each situation. Then find each sum.
13) FOOTBALL A team gains 20 yards. Then they lose 7 yards.
14) MONEY Roger owes his mom $\$ 5$. He borrows another $\$ 6$ from her.
15) HOT AIR BALLOON A balloon rises 340 feet into the air. Then it descends 130 feet.
16) CYCLING A cyclist travels downhill for 125 feet. Then she travels up a hill 50 feet.

