$\qquad$ Pd $\qquad$ Date
Are you smarter than a $5^{\text {th }}$ grader?
Ex. What two numbers add to be 5 but when multiplied your answer is 6 ?
Ans: 2 and 3 because $2+3=5$ and $2(3)=6$

1) What two numbers add to be 2 but when multiplied your answer is 1 ?
2) What two numbers add to be 8 but when multiplied your answer is 15 ?
3) What two numbers add to be 14 but when multiplied your answer is 48 ?
4) What two numbers add to be -4 but when multiplied your answer is 4 ?
5) What two numbers add to be -6 but when multiplied your answer is -7 ?
6) What two numbers add to be 2 but when multiplied your answer is -8 ?
7) What two numbers add to be 9 but when multiplied your answer is -52 ?
8) What two numbers add to be 0 but when multiplied your answer is -9 ?
9) What two numbers add to be -5 but when multiplied your answer is -6 ?
10) What two numbers add to be 20 but when multiplied your answer is -44 ?
**Key Idea:

- When your product is negative, your addition has the sign of the $\qquad$ number.
- If your product is positive but your addition is negative, both numbers must be $\qquad$ .


## Factoring Trinomials into the Product of Binomials

- A quadratic trinomial is in the form $a x^{2}+b x+c$.
- quadratic means trinomial means
- When $a=1$, we can factor by reverse FOIL, reverse box method, or reverse rockets.


