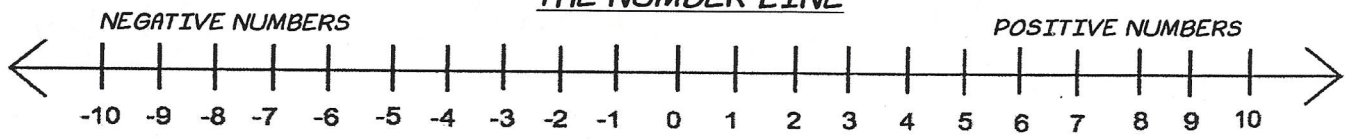
# INTEGER CHEAT SHEET

**Integers**- A set of positive and negative whole numbers. They can be represented on a number line.

*THE NUMBER LINE*




**Absolute Value**- The distance a number is from zero on the number line. An absolute value is never negative. Examples: $|-5| = 5$ and $|5| = 5$

## ADDING INTEGERS

*SAME SIGN- Add and Keep the Sign!*

Add the absolute value of the numbers and keep the same sign.

(positive) + (positive) = Positive

(+4) + (+5) = +9

(negative) + (negative) = Negative

(-4) + (-5) = -9

*DIFFERENT SIGNS- Subtract and Keep the Sign of the Bigger Number!*

Subtract the absolute value of the numbers and keep the sign of the bigger number.

(-4) + (+5) = +1
(+4) + (-5) = -1

## SUBTRACTING INTEGERS

**Do not subtract integers. You must change the signs:**
**"Add the Opposite"**

*KEEP- Keep the sign of the first number*

*CHANGE- Change the subtraction sign to addition*

*Flip- Flip the sign of the second number to the opposite sign. If it is positive- change to negative. If it is negative- change to positive.*

(+4) - (-4)

Keep change flip
(+4) + (+4)

**NOW USE THE RULES FOR ADDING:**
SAME SIGN- Add absolute values and keep sign:

(+4) + (+4) = 8

## MULTPLYING INTEGERS

*SAME SIGNS- POSITIVE*
Multiply the numbers. Answer will be positive.

(-5) × (-5) = +25

*DIFFERENT SIGNS- NEGATIVE*
Multiply the numbers. Answer will be negative

(+5) × (-5) = -25

## DIVIDING INTEGERS

*SAME SIGNS- POSITIVE*
Divide the numbers. Answer will be positive.

(-5) ÷ (-5) = +1

*DIFFERENT SIGNS- NEGATIVE*
Divide the numbers. Answer will be negative

(+5) ÷ (-5) = -1

# Adding Integers (A)

Use an integer strategy to find each answer.

1. (-2) + (+8) =
2. (+9) + (+7) =
3. (+7) + (-1) =
4. (+3) + (+1) =
5. (+7) + (+5) =
6. (-5) + (+9) =
7. (+2) + (-5) =
8. (-1) + (+3) =
9. (+8) + (+4) =
10. (-7) + (-2) =
11. (-6) + (-7) =
12. (+7) + (+8) =
13. (-4) + (+3) =
14. (-2) + (-6) =
15. (+9) + (-4) =
16. (+7) + (+3) =
17. (-5) + (-9) =
18. (-5) + (-6) =
19. (-9) + (-4) =
20. (-5) + (+4) =
21. (-3) + (-9) =
22. (-7) + (+1) =
23. (-1) + (-8) =
24. (-7) + (-4) =
25. (-1) + (+4) =
26. (+7) + (-4) =
27. (-6) + (+9) =
28. (-4) + (-1) =
29. (+9) + (+3) =
30. (+2) + (-5) =

# Subtracting Integers (A)

Use an integer strategy to find each answer.

1. (-6) - (+2) =
2. (-3) - (+8) =
3. (+5) - (-5) =
4. (-9) - (-8) =
5. (+9) - (-4) =
6. (+6) - (-9) =
7. (-6) - (+6) =
8. (+8) - (-7) =
9. (+7) - (-5) =
10. (-8) - (-8) =
11. (-6) - (+3) =
12. (+2) - (+1) =
13. (+5) - (+1) =
14. (-3) - (+4) =
15. (-6) - (+3) =
16. (+6) - (-2) =
17. (-4) - (+3) =
18. (+2) - (+9) =
19. (-3) - (+5) =
20. (-6) - (+1) =
21. (+1) - (+1) =
22. (-8) - (+5) =
23. (+8) - (-8) =
24. (-2) - (+3) =
25. (-9) - (-4) =
26. (+1) - (+4) =
27. (+3) - (+4) =
28. (+1) - (+3) =
29. (+7) - (+9) =
30. (+8) - (-9) =

# Multiplying Integers (A)

Find each product.

1. $1 \times 8 =$
2. $(-5) \times 1 =$
3. $6 \times 8 =$
4. $(-7) \times 5 =$
5. $(-6) \times 5 =$
6. $3 \times 4 =$
7. $0 \times (-9) =$
8. $8 \times (-3) =$
9. $5 \times 2 =$
10. $7 \times 8 =$
11. $4 \times 7 =$
12. $(-4) \times 2 =$
13. $(-9) \times (-2) =$
14. $4 \times 4 =$
15. $(-8) \times 6 =$
16. $3 \times (-1) =$
17. $4 \times 0 =$
18. $3 \times (-2) =$
19. $0 \times (-5) =$
20. $3 \times (-9) =$
21. $(-6) \times 6 =$
22. $0 \times 8 =$
23. $3 \times (-3) =$
24. $(-2) \times 5 =$
25. $(-5) \times (-2) =$
26. $8 \times 9 =$
27. $(-5) \times 9 =$
28. $(-2) \times 1 =$
29. $4 \times (-4) =$
30. $(-2) \times (-3) =$
31. $6 \times 5 =$
32. $(-7) \times (-4) =$
33. $(-3) \times 9 =$
34. $(-2) \times 8 =$
35. $6 \times (-3) =$
36. $(-5) \times 2 =$
37. $(-9) \times 3 =$
38. $(-5) \times (-5) =$
39. $9 \times 7 =$
40. $(-8) \times (-1) =$
41. $7 \times (-4) =$
42. $3 \times 2 =$
43. $0 \times (-6) =$
44. $(-3) \times 8 =$
45. $9 \times 2 =$
46. $8 \times (-7) =$
47. $(-2) \times (-4) =$
48. $(-9) \times 2 =$
49. $(-6) \times (-3) =$
50. $7 \times 2 =$

# Dividing Integers (A)

Find each quotient.

1. $(-28) \div 7 =$
2. $(-18) \div (-6) =$
3. $18 \div (-9) =$
4. $(-49) \div 7 =$
5. $15 \div 5 =$
6. $(-25) \div (-5) =$
7. $(-40) \div (-8) =$
8. $(-36) \div (-6) =$
9. $(-42) \div 6 =$
10. $56 \div 8 =$
11. $(-42) \div (-7) =$
12. $25 \div (-5) =$
13. $(-18) \div (-2) =$
14. $42 \div 7 =$
15. $(-40) \div 5 =$
16. $45 \div 5 =$
17. $48 \div 8 =$
18. $24 \div 6 =$
19. $(-54) \div 9 =$
20. $9 \div 9 =$
21. $56 \div (-7) =$
22. $56 \div (-8) =$
23. $21 \div 7 =$
24. $25 \div 5 =$
25. $(-21) \div 7 =$
26. $32 \div (-8) =$
27. $81 \div (-9) =$
28. $(-10) \div (-2) =$
29. $(-2) \div 2 =$
30. $6 \div (-3) =$
31. $(-6) \div (-3) =$
32. $54 \div 6 =$
33. $(-42) \div (-6) =$
34. $(-24) \div (-4) =$
35. $(-12) \div 6 =$
36. $(-36) \div (-9) =$
37. $(-8) \div 8 =$
38. $64 \div 8 =$
39. $3 \div (-1) =$
40. $5 \div (-1) =$
41. $(-35) \div (-5) =$
42. $(-64) \div (-8) =$
43. $9 \div (-1) =$
44. $14 \div 7 =$
45. $49 \div 7 =$
46. $7 \div 7 =$
47. $64 \div (-8) =$
48. $16 \div 8 =$
49. $(-21) \div 3 =$
50. $(-56) \div 8 =$

Name : _____ Score : _____

Teacher : _____ Date : _____

## Solve the Equations

1) $-60 = 5c$

2) $66 = -6x$

3) $8 = a - 7$

4) $-5 = \frac{r}{5}$

5) $4 = -7 + y$

6) $\frac{n}{7} = 4$

7) $-4f = 40$

8) $d - 5 = 8$

9) $-8 = -2 + k$

10) $2b = -18$