

Math 45 Handout for 1.4 Adding, Subtracting, Multiplying, and Dividing Integers

Objectives:

1. Add subtract, multiply and divide integers (signed numbers).

Adding:

Subtracting:

Multiplying:

Dividing:

2. Find the additive inverse of a number.

3. In Math 35, we used mixed numbers. In Math 45, do not use mixed numbers. Instead use improper fractions or decimals.

You should already know all of these problems from Math 35. If you are having trouble, get tutoring help right away from the Math Center (room 426), the ASC (room 420), or Ms. Carey's office hours.

Find the sum.

1) $46 + (-20)$

2) $22 + (-144)$

3) $-65 + (-140)$

4) $20 + (-20)$

5) $5 + (-2) + 18 + (-21)$

6) $-17 + (-10) + (-6) + (-24)$

Find the additive inverse (opposite) of the integer.

7) 4

8) -9

Find the difference. (Add the additive inverse.)

9) $16 - 10$

Find the difference.

10) $3 - 14$

11) $12 - (-5)$

12) $0 - (-10)$

13) $-8 - (-7)$

14) $-17 - (-17)$

Find the product.

15) $7(-2)$

16) $(-2)(-3)(-6)$

17) $3 \cdot -4 \cdot -4$

18) $(-2)(-2)(0)(8)$

19) $(-5)(4)(-3)(-3)$

Evaluate the expression.

20) $|-49| + 30$

Find the multiplicative inverse (or reciprocal) of the number.

23) 15

24) 1

Divide.

25) $\frac{-28}{7}$

26) $\frac{21}{-3}$

27) $\frac{-16}{-8}$

28) $-16 \div 8$

29) $30 \div (-5)$

30) $-104 \div (-4)$

Solve the problem.

21) A deep-sea diver dives from the surface to 126 meters below the surface and then swims up 11 meters, down 15 meters, down another 26 meters, and then up 21 meters. Find the diver's depth after these movements.

22) Jared borrowed \$264 from his friend Linda. He paid her back \$41, but then had to borrow another \$75. How much does he still owe her?