

Chapter 1.5 Real Number System

Signed Numbers

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Operations

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Addition Using the Number Line



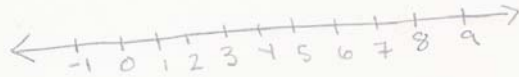
1

2

3

4

eg $3 + 5 =$



① $-2 + (-6) =$



② $3 + (-7) =$



③ $(-3) + 9 =$



Adding Using Same Signs

1.

2.

(Eg) $(-5) + (-6) =$

Adding Using Different Signs

1.

2.

(Eg) $7 + (-12) =$

① $5 + 7 =$

② $(-5) + (-6) =$

③ $7 + (-12) =$

④ $(-14) + 8 =$

Additive Inverse

Double Negative Rule

Subtraction of Real Numbers

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$$\textcircled{\text{eg}} 3-5=$$

$$\textcircled{1} 9-(-12)=$$

$$\textcircled{2} -6-17=$$

$$\textcircled{3} -8-(-14)=$$

Expressions with many numbers

$$\textcircled{\text{eg}} 3-5+17=$$

$$\textcircled{1} 14-9-(-15)=$$

$$\textcircled{2} 75-16+27=$$

$$\textcircled{3} 42-37+87-93=$$

Chapter 1.6 Multiplying & Dividing Reals

Multiplication

1.

2.

$$\textcircled{\text{eg}} (-5)(-3)=$$

3.

$$\textcircled{\text{eg}} (-7)(2)=$$

4.

$$\textcircled{1} 3 \cdot 4 =$$

$$\textcircled{2} (-3)(4) =$$

$$\textcircled{3} 3(-4) =$$

$$\textcircled{4} (-3)(-4) =$$

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Multiplicative Inverses

1.

2.

(Eg) $\frac{2}{3}$

Note

Division

1.

2.

3.

4.

(eg) $\frac{-30}{12} =$

① $25 \div 5 =$

② $72 \div (-28) =$

③ $\frac{-45}{-18} =$

Division By Zero

1.

2.

3.

Average

eg 18, 12, 0, -4, -10

Inclusive

Exclusive

eg Find the average of all even integers between -18 & 4, inclusive of both.

Appendix D for more information