

12.2

Adding Rational Numbers

Do Now

Tell whether the number belongs to each of the following number sets: *rational numbers*, *integers*, *whole numbers*.

1) -5

2) 0

3) -2.16

4) 12

Adding Integers Review

$$-8 + -5 =$$

$$-7 + -12 =$$

SAME SIGN

- Ignore the signs
- Add numbers
- Put sign back

$$-8 + 17 =$$

$$6 + -13 =$$

DIFFERENT SIGNS

- Ignore the signs
- Subtract
- Put sign back of number that "looks" the biggest

Add. & Sub. Fractions & MN Review

$$3) \quad \frac{3}{4} + \frac{5}{8}$$

$$4) \quad \frac{5}{6} - \frac{1}{4}$$

Add. & Sub. Fractions & MN Review

$$5) \quad 25\frac{1}{3} + 16\frac{2}{5}$$

$$6) \quad 73\frac{2}{3} - 54\frac{1}{2}$$

PRACTICE

$$7) \quad 58 - 49\frac{3}{5}$$

$$8) \quad 19 - 17\frac{5}{6}$$

Sub. Mixed Numbers with Borrowing

$$9) \quad 29\frac{1}{2} - 26\frac{5}{6}$$

Adding Pos. & Neg. Fractions & MN

$$1) \quad -\frac{1}{6} + \left(-\frac{5}{12}\right)$$

SAME SIGN

- Ignore the signs
- Add numbers
- Put sign back

DIFFERENT SIGNS

- Ignore the signs
- Subtract
- Put sign back of number that "looks" the biggest

Adding Pos. & Neg. Fractions & MN

$$2) \quad -\frac{4}{5} + \frac{3}{20}$$

SAME SIGN

- Ignore the signs
- Add numbers
- Put sign back

DIFFERENT SIGNS

- Ignore the signs
- Subtract
- Put sign back of number that "looks" the biggest

Adding Pos. & Neg. Fractions & MN

$$3) \quad -\frac{3}{4} + \frac{5}{8}$$

$$4) \quad -\frac{5}{6} + \left(-\frac{1}{4}\right)$$

Adding Pos. & Neg. Fractions & MN

$$5) \quad -5\frac{1}{3} + 6\frac{2}{5}$$

$$6) \quad -2\frac{2}{3} + 2\frac{1}{2}$$

PRACTICE

$$7) -5\frac{3}{4} + \left(-4\frac{5}{6}\right)$$

$$8) 1\frac{2}{5} + \left(-3\frac{1}{2}\right)$$

PRACTICE

$$9) \frac{9}{10} + (-3)$$

$$10) -6\frac{1}{3} + \frac{20}{3}$$

Adding Pos. & Neg. Decimals

$$11) \quad -4.05 + 7.6$$

SAME SIGN

- Ignore the signs
- Add numbers
- Put sign back

DIFFERENT SIGNS

- Ignore the signs
- Subtract
- Put sign back of number that "looks" the biggest

Adding Pos. & Neg. Decimals

$$12) \quad -8.15 + (-4.3)$$

SAME SIGN

- Ignore the signs
- Add numbers
- Put sign back

DIFFERENT SIGNS

- Ignore the signs
- Subtract
- Put sign back of number that "looks" the biggest

Adding Pos. & Neg. Decimals

13) $0.65 + (-2.75)$

SAME SIGN

- Ignore the signs
- Add numbers
- Put sign back

DIFFERENT SIGNS

- Ignore the signs
- Subtract
- Put sign back of number that "looks" the biggest