

5.4 Dividing Decimals

* Dividing Decimal Numbers

1. Move the decimal point in the divisor to the right until the divisor is a whole number
2. Move the decimal point in the dividend to the right the same number of places as in step 1
3. Place the decimal point in the quotient directly over the moved decimal point in the dividend

Ex 1. Perform indicated operations.

a. $-15.89 \div 14$

b. $-2.808 \div (-104)$

c. $166.88 \div 5.6$

d. $1.976 \div 0.16$

e. $23.4 \div 0.57$
Round to the nearest tenth.

f. $17.5 \div 0.48$
Round to the nearest hundredth.

g. $0.49 \div 10$

h. $0.49 \div 100$

*** Dividing Decimals by Power of 10 such as 10, 100, 1000, 10000, ...**

Move the decimal point of the dividend to the left the same number of places as there are zeros in the power of 10.

Ex 2. Perform indicated operations.

a. $362.1 \div 10000 =$

b. $-4.9 \div 10 =$

c. $1546.3 \div 100 =$

Ex 3. A bag of fertilizer covers 1250 square feet of lawn. Tim Parker's lawn measures 14800 square feet. How many bags of fertilizer does he need? If he can buy only whole bags of fertilizer, how many whole bags does he need?

Ex 4. DD filled his car tank, and drove 423.8 miles. Then he filled the tank again. When he refilled the tank, it took 19.35 gallons of gas. Calculate the miles per gallon for DD. Round to the nearest tenth.