

4.MD.A.1 Convert Customary Units for Liquid Volumes

4.MD.A.1: Know relative sizes of measurement units within one system of units

1. Convert the units to fill in the blanks.

a. 1 pint = ____ cups

d. 1 tablespoon = ____ teaspoons

b. 1 gallon = ____ quarts

e. 1 cup = ____ fluid ounces

c. 1 quart = ____ pints

f. 3 teaspoons = ____ tablespoon

2. Complete each of the conversion tables.

| | | | | | |
|------------|---|----|----|----|----|
| Pints (pt) | 5 | | | 17 | 30 |
| Cups (c) | | 14 | 30 | | |

| | | | | | |
|--------------------|---|---|----|----|----|
| Teaspoons (tsp) | 9 | | 39 | 57 | |
| Tablespoons (tbsp) | | 4 | | | 11 |

| | | | | | |
|---------------|---|----|----|----|-----|
| Gallons (gal) | 4 | 10 | | 13 | |
| Quarts (qt) | | | 64 | | 100 |

| | | | | | |
|----------------------|----|---|---|----|----|
| Cups (c) | | 3 | 7 | | |
| Fluid ounces (fl oz) | 16 | | | 72 | 88 |

| | | | | | |
|-------------|---|---|----|-----|----|
| Quarts (qt) | 2 | 7 | | | 23 |
| Pints (pt) | | | 36 | 100 | |

3. Is it possible that the two containers have the same capacity? Explain with examples.

Solution:

4. Uncle Ben got 5 gallons of cow's milk from the farm. How many pints of cow's milk does he have?

Solution:

5. The gas tank of Daniel's car can hold 16 gallons of gasoline. How many quarts can the tank hold?

Solution:

6. True or False. 1 pint = 2 cups = 8 fluid ounces?

Solution:

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Answer Key

4.MD.A.1: Know relative sizes of measurement units within one system of units

1. Convert the units to fill in the blanks.

a. 1 pint = 2 cups

d. 1 tablespoon = 3 teaspoons

b. 1 gallon = 4 quarts

e. 1 cup = 8 fluid ounces

c. 1 quart = 2 pints

f. 3 teaspoons = 1 tablespoon

2. Complete each of the conversion tables.

| | | | | | |
|------------|----|----|----|----|----|
| Pints (pt) | 5 | 7 | 15 | 17 | 30 |
| Cups (c) | 10 | 14 | 30 | 34 | 60 |

| | | | | | |
|--------------------|---|----|----|----|----|
| Teaspoons (tsp) | 9 | 12 | 39 | 57 | 33 |
| Tablespoons (tbsp) | 3 | 4 | 13 | 19 | 11 |

| | | | | | |
|---------------|----|----|----|----|-----|
| Gallons (gal) | 4 | 10 | 16 | 13 | 25 |
| Quarts (qt) | 16 | 40 | 64 | 52 | 100 |

| | | | | | |
|----------------------|----|----|----|----|----|
| Cups (c) | 2 | 3 | 7 | 9 | 11 |
| Fluid ounces (fl oz) | 16 | 24 | 56 | 72 | 88 |

| | | | | | |
|-------------|---|----|----|-----|----|
| Quarts (qt) | 2 | 7 | 18 | 50 | 23 |
| Pints (pt) | 4 | 14 | 36 | 100 | 46 |

3. Is it possible that the two containers have the same capacity? Explain with examples.

Yes,



8 fl oz of soda



1 cup of coffee

4. Uncle Ben got 5 gallons of cow's milk from the farm. How many pints of cow's milk does he have?

40 pints

5. The gas tank of Daniel's car can hold 16 gallons of gasoline. How many quarts can the tank hold?

64 quarts

6. True or False. 1 pint = 2 cups = 8 fluid ounces?

False