

Grade 7 - Multistep Problems with Rational Numbers - Test

Common Core 7.EE.B.3 · maths-pdf.fr/en/

Name: _____ Class: _____ Date: ____/____/____

This 45-minute test checks multistep real-life problems with positive and negative rational numbers in any form, converting between fractions, decimals, and percents, and checking with estimation (Common Core 7.EE.B.3). It has 9 questions worth 20 points in all. Show your work, because most questions give partial credit for correct steps.

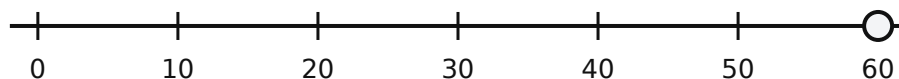
About this test

- Grade: Grade 7
- Chapter: Multistep Problems with Rational Numbers
- Standards: 7.EE.B.3
- Time: 45 minutes
- Total: 20 points

Question 1 - Forms of a number [2 pts]

Write $\frac{5}{8}$ as a decimal and as a percent. Then write 0.04 as a fraction in simplest form.

Question 2 - Estimate and compute [2 pts]



Estimate with a number line if you like.

Estimate 29.7×2.1 using compatible numbers. Then find the exact product and tell whether the exact product is reasonable.

Question 3 - Mixed forms [2 pts]

Evaluate $\frac{3}{4} \times 80 - 0.25 \times 40$.

Question 4 - Overtime [2 pts]

Ethan earns \$15 per hour for the first 40 hours and time and a half for each extra hour. Find his pay for 44 hours.

Question 5 - Recipe [2 pts]

A punch recipe uses $3\frac{1}{3}$ quarts of juice. Maya makes 60% of the recipe. Find the juice she uses.

Question 6 - Team dinner [2 pts]

Item	Cost
Pizza	\$18.50
Drinks	\$7.25
Dessert	\$6.75

A team dinner.

Six players split the dinner equally after a 20% tip is added to the total. Find each player's share.

Question 7 - Debt and earnings [2 pts]

Savings

-\$18

Earned

+\$42

Debt and earnings.

Noah owes \$18 (write -18) and then earns \$42 mowing lawns. He gives $\frac{1}{3}$ of his new balance to a charity. Find the amount he gives and the amount he keeps.

Question 8 - Budget [3 pts]

Budget	\$2,400	
ent 3/10	?	
Food 1/4	?	

A monthly budget.

- a. Find the dollar amount for rent and for food. (1 point)
- b. Find the total for rent and food and the percent of the budget this is. (1 point)
- c. Find the amount left after rent, food, and a \$300 car payment. (1 point)

Question 9 - Coat purchase [3 pts]



The price changes twice.

Priya buys a coat for \$120 with 25% off and then pays 8% tax. (a) Find the sale price. (b) Find the final cost. (c) She pays with a \$100 bill. Find her change.