

GRADE 7 MATHS

Mixed Word Problems

Complete Printable Worksheet Pack

6 Worksheets • Multi-Step Problems • Fractions • Decimals • Percentages • Ratio • Geometry • Time • Money
• Reasoning

Worksheet 1: Multi-Step Number Problems

Name: _____ Date: _____

1. A school orders 24 boxes of pencils. Each box contains 36 pencils. After giving 275 pencils to students, how many pencils remain?
2. A warehouse has 8,450 notebooks. It sends 2,375 to one school and 1,890 to another. How many notebooks remain?
3. A charity collects \$2,480 in Week 1 and \$3,175 in Week 2. It spends \$1,950 on supplies. How much money is left?
4. A factory makes 1,250 items each day for 6 days. It packs them equally into boxes of 25. How many boxes are needed?
5. A library has 18 shelves with 42 books on each. It removes 96 damaged books and receives 135 new books. How many books are there now?
6. A family buys 4 tickets at \$28 each and 3 meal vouchers at \$15 each. They pay with \$200. How much change do they receive?
7. A farmer packs 3,600 apples equally into 24 crates. Then 18 apples are removed from each crate. How many apples remain altogether?
8. A number is multiplied by 7 and then 35 is added to give 196. Find the number.

Answer Key — Worksheet 1

1. 589 pencils.
2. 4,185 notebooks.
3. \$3,705.
4. 300 boxes.
5. 795 books.
6. \$43.
7. 3,168 apples.
8. 23.

Worksheet 2: Fractions, Decimals & Percentages in Context

Name: _____ Date: _____

1. A tank holds 240 L. It is $\frac{3}{5}$ full. How many litres are in the tank?
2. A student spends 0.35 of a \$80 allowance on a book. How much is spent?
3. A jacket costs \$120 and is discounted by 25%. What is the sale price?
4. A recipe needs 2.5 cups of flour for one batch. How much flour is needed for 4 batches?
5. A class has 32 students. $\frac{3}{8}$ choose art club. How many students is that?
6. A shop increases a \$250 price by 12%. What is the new price?
7. A runner completes 7.5 km in the morning and 4.85 km in the evening. How far altogether?
8. A bottle contains 1.5 L. A student drinks 35%. How much remains?
9. A school has 480 students. 45% are in sports clubs. Of those students, $\frac{2}{3}$ play team sports. How many students play team sports?
10. A \$600 laptop is discounted 15%, then a further \$30 coupon is applied. Find the final price.

Answer Key — Worksheet 2

1. 144 L.
2. \$28.
3. \$90.
4. 10 cups.
5. 12 students.
6. \$280.
7. 12.35 km.
8. 0.975 L.
9. 144 students.
10. \$480.

Worksheet 3: Ratio, Rate & Proportion Problems

Name: _____ Date: _____

1. The ratio of red to blue beads is 3:5. If there are 40 beads altogether, how many are red and how many are blue?
2. A car travels 180 km in 3 hours at a constant speed. How far will it travel in 5 hours?
3. A recipe serves 6 people and uses 450 g of rice. How much rice is needed for 10 people?
4. A map scale is 1 cm : 8 km. Two towns are 6.5 cm apart on the map. Find the actual distance.
5. A printer produces 420 pages in 7 minutes. At the same rate, how many pages will it produce in 12 minutes?
6. A school has boys:girls = 4:5. There are 315 students altogether. How many are girls?
7. A cyclist travels 27 km in 1.5 hours. Find the average speed in km/h.
8. A machine uses 3.6 L of fuel to make 120 units. At the same rate, how much fuel is needed for 500 units?
9. A class shares \$840 in the ratio 3:4:5 among three teams. How much does each team receive?
10. A tap fills 18 L in 3 minutes. At the same rate, how long will it take to fill 90 L?

Answer Key — Worksheet 3

1. 15 red, 25 blue.
2. 300 km.
3. 750 g.
4. 52 km.
5. 720 pages.
6. 175 girls.
7. 18 km/h.
8. 15 L.
9. \$210, \$280 and \$350.
10. 15 minutes.

Worksheet 4: Geometry, Measurement & Area Problems

Name: _____ Date: _____

1. A rectangular garden is 18 m long and 12 m wide. Find its perimeter and area.
2. A square playground has side 14 m. A 2 m wide gate is not fenced. How much fencing is needed?
3. A triangular sign has base 16 cm and height 9 cm. Find its area.
4. A rectangular floor is 7.5 m by 4 m. Square tiles have side 0.5 m. How many tiles are needed?
5. A cuboid box measures 12 cm $\times$ 8 cm $\times$ 5 cm. Find its volume.
6. A water tank holds 2,400 L. It is filled to 65%. How many litres are in it, and how many litres more are needed to fill it?
7. A rectangular field has perimeter 100 m and length 30 m. Find its width and area.
8. A wall is 8 m long and 3 m high. A door measuring 2 m $\times$ 1 m is not painted. What area must be painted?
9. A rectangular patio is 9 m by 6 m. A border 1 m wide is built all around the outside. What is the total area including the border?
10. A cube has volume 729 cm³. Find the length of one edge.

Answer Key — Worksheet 4

1. Perimeter 60 m; area 216 m².
2. 54 m.
3. 72 cm².
4. 120 tiles.
5. 480 cm³.
6. 1,560 L; 840 L more.
7. Width 20 m; area 600 m².
8. 22 m².
9. 88 m².
10. 9 cm.

Worksheet 5: Time, Speed, Money & Real-Life Planning

Name: _____ Date: _____

1. A train leaves at 08:45 and travels for 2 h 35 min. When does it arrive?
2. A family drives 315 km at an average speed of 70 km/h. Approximately how long does the journey take?
3. A concert starts at 19:20 and ends at 22:05, including a 20-minute interval. How long is the actual performance time?
4. A worker earns \$18.50 per hour for 7.5 hours. Find the day's pay.
5. A taxi charges \$4 plus \$1.80 per kilometre. Find the fare for 12 km.
6. A flight leaves Delhi at 21:40 and lasts 3 h 10 min. What is the arrival time in the same time zone?
7. A shop offers 20% off a \$75 item. A customer buys 3 items. What is the total after discount?
8. A bus route takes 48 minutes. There are 6 identical routes. If there is a 12-minute break after every two routes, how long does the full schedule take?
9. A family has a \$500 travel budget. Flights cost \$260, hotel \$145 and meals \$68. How much remains?
10. A runner wants to complete 18 km in 2 h 15 min. What average speed is required?

Answer Key — Worksheet 5

1. 11:20.
2. 4 h 30 min.
3. 2 h 25 min.
4. \$138.75.
5. \$25.60.
6. 00:50 the next day.
7. \$180.
8. 5 h 12 min.
9. \$27.
10. 8 km/h.

Worksheet 6: Mixed Reasoning Challenge

Name: _____ Date: _____

1. A school buys 15 packs of 24 markers. $\frac{3}{8}$ of all markers are used in art classes. How many markers remain?
2. A shop marks an item at \$240, gives 15% discount, then adds 10% tax to the discounted price. Find the final price.
3. A rectangular garden has area 384 m^2 and width 16 m. A path of length 16 m is built along one long side. Find the garden's length and the new total length of the long-side boundary including the path.
4. A cyclist travels 24 km at 16 km/h and then 36 km at 18 km/h. Find total travel time and average speed for the whole journey.
5. A class has 40 students. 60% study French, 45% study Spanish, and 20% study both. How many study at least one of the two languages?
6. A tank is $\frac{2}{3}$ full. After 180 L are added, it becomes $\frac{5}{6}$ full. Find the tank's capacity.
7. A number is increased by 25% and then decreased by 20%. Is the final number equal to the original? Explain with an example.
8. A family spends 35% of its budget on housing, 20% on food and 15% on transport. If the remaining \$900 is for other expenses, find the total budget.
9. A rectangular hall is 20 m by 14 m. A 3 m wide strip is removed along one 20 m side. What percentage of the original area remains?
10. A delivery van travels 120 km. For the first 60 km it averages 40 km/h; for the remaining 60 km it averages 60 km/h. Find the average speed for the entire journey.

Answer Key — Worksheet 6

1. 225 markers.
2. \$224.40.
3. Length 24 m; combined long-side length 40 m.
4. 3.5 h; average speed ≈ 17.14 km/h.
5. 34 students.
6. 1,080 L.
7. Yes; $100 \rightarrow 125 \rightarrow 100$.
8. \$3,000.
9. 78.57% approximately.
10. 48 km/h.