

Complete all questions on separate sheet and transfer final answers to blanks on the last page of this booklet. Attach this question sheet to the front. (1 mark each unless specified otherwise)

1. Solve. Show all steps.

a) $3\frac{4}{5} + 1\frac{2}{3}$

d) $\frac{5}{8} \div 2\frac{1}{2}$

b) $5\frac{1}{4} - 2\frac{5}{6}$

e) $4 - 3 \times 2^3 + 10 \div 2$

c) $3\frac{1}{3} \times 3\frac{3}{15}$

2. Arrange the following numbers in ascending order:

$$-0.65, 1.65, -\frac{2}{3}, -1\frac{3}{5}, 1\frac{3}{5}$$

3. Replace each $\square$ with $>$, $<$, or $=$ to make each statement true:

a) $-\frac{1}{3} \square - 0.3$

b) $-\frac{8}{6} \square \frac{-4}{3}$

c) $1.75 \square \frac{17}{10}$

4. On January 15, 1972, Chinook winds in Loma, Montana caused the greatest recorded temperature change in 24 hours. The temperature rose from -48°C to 9°C . How many degrees did the temperature rise? What was the average change in temperature per hour? (2 marks)

5. Calculate:

a) $-1.3 \times 2.4 + 5.6 \times (-2.5)$

b) $(5.76 - 3.45)(2.34 - 1.57)$

6. Calculate:

a) $-1\frac{1}{7} - (-2\frac{1}{5})$

b) $(-1\frac{2}{5}) \div 3\frac{1}{2}$

7. Is each of the following numbers a perfect square? If it is, calculate the square root.

a) $\frac{1}{25}$

b) 0.0001

c) $\frac{7}{16}$

d) 0.49

8. You need to replace the fence around your backyard garden. It costs \$75 to build each metre of fence, including new materials and labour. If your garden is square with an area of 18 m^2 , how much would it cost to enclose the entire garden with a new fence? (2 marks)

9. Quentin has 96 retaining wall blocks. He uses $\frac{1}{4}$ of the blocks on the first day. The second day he uses $\frac{4}{9}$ of the remaining amount. How many does he have left over? (2 marks)

10. Three people ordered a pizza. John ate $\frac{1}{4}$ of the pizza. Jane ate $\frac{1}{7}$ of what was left after John ate. How much pizza was left for the last person? (2 marks)

Answers: Fill in the blanks with your final answer.

1a. $\frac{82}{15}$ or $5\frac{7}{15}$ b. $\frac{29}{12}$ or $2\frac{5}{12}$ c. $\frac{32}{3}$ or $10\frac{2}{3}$ d. $\frac{1}{4}$ e. -15

2a. $-1\frac{3}{5}$, $-\frac{2}{3}$, -0.65 , $1\frac{3}{5}$, 1.65

3a. $<$ b. $=$ c. $>$

4a. 57°C $\sim 2.4^{\circ}\text{C}$

5a. -17.12 8b. 1.7787

6a. $\frac{37}{35}$ or $1\frac{2}{35}$ 9b. $-\frac{2}{5}$

7a. $\frac{1}{5}$ 10b. 0.01 10c. NO 10d. 0.7

12a. 4.24M/side $\$1272$

12⁹ 40 Blocks

12¹⁰ $\frac{9}{14}$

