

Directions: Work out and answer each question on a separate sheet of paper and mark the grade level by which the Minnesota Academic Standards in Mathematics expect students to have mastery of the concept (grades 2–6 or other) below. For more extra credit, give the standard’s reference number.

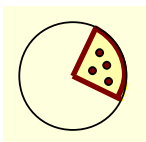
1. Mastery by Grade Level: (2) (3) (4) (5) (6) (other) Ref. number _____
2. Mastery by Grade Level: (2) (3) (4) (5) (6) (other) Ref. number _____
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23. Mastery by Grade Level: (2) (3) (4) (5) (6) (other) Ref. number _____
24. Mastery by Grade Level: (2) (3) (4) (5) (6) (other) Ref. number _____
25. Mastery by Grade Level: (2) (3) (4) (5) (6) (other) Ref. number _____

Directions: Answer each question and determine the grade level by which the Minnesota Academic Standards in Mathematics expect students to have mastery of the concept (grades 2–6 or other/7–12).

- Pat has 100 more Lego blocks than Kim. Kim has 382 Lego blocks. How many Lego blocks does Pat have?
- There are 17 students in your class and granola bars come 10 to a box. How many boxes do you need to order to have enough bars for everyone?
- You have 27 people and 9 tables. If each table seats the same number of people, how many people will you put at each table?

4. Which illustrations represent $\frac{3}{4}$? (Mark all correct solutions.)

(a) $\frac{3}{4}$ of the pie has been eaten.



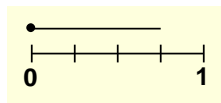
(b) 3 out of 4 buttons are grey.



(c) $\frac{3}{4}$ of a dollar



(d) The pin is $\frac{3}{4}$ of an inch long.



- A group of 324 students are going to a museum in 6 buses. If each bus has the same number of students, how many students will be on each bus?
- Pat walked $\frac{5}{3}$ miles and Kim walked $1\frac{3}{4}$ miles. Compare the distances Pat and Kim walked.
- Consider the solutions to the two problems:
 If 77 amusement ride tickets are to be distributed evenly among 4 children, how many tickets will each child receive?
 If \$77 is to be distributed evenly among 4 children, how much will each child receive?
- In order to work properly, a part must fit through a 0.24 inch wide space. If a part is $\frac{1}{4}$ inch wide, will it fit?
- Calculate the perimeter of a soccer field when the length is 109.7 meters and the width is 73.1 meters.
- If a woman making \$25 an hour gets a 10% raise, how much additional money an hour will she make?

20. A cellular phone company charges \$0.12 per minute. If the bill was \$11.40 in April, how many minutes were used?
21. Which combinations can be used to make 50 cents. (*Mark all correct solutions.*)
- (a) 4 dimes and 2 nickels
 - (b) 1 quarter, 1 dime, 2 nickels, and 5 pennies
 - (c) 1 quarter, 2 dimes, and 1 nickel
 - (d) 2 quarters
22. Your trip began at 9:50 a.m. and ended at 3:10 p.m. How long were you traveling?
23. The classroom door has a width of 32 inches and length of 79 inches. Compute the area of the door.
24. The mean of the set of numbers 1, 1, 4, 6 can be found which of the following ways?
(*Select all correct methods.*)
- (a) It can be leveled out by taking one unit from the 4 and three units from the 6 and adding them to the 1s, making four 3s.
 - (b) $(1 + 1 + 4 + 6) \div 4 = 3$
 - (c) $(2 \times 1 + 4 + 6) \div 4 = 3$
 - (d) 1 is the most frequent number.
25. Find the probability of rolling a 5 with a balanced number cube.