

## MCMC Fall 2025

## Intermediate - Speed

## DO NOT BEGIN UNTIL YOU ARE INSTRUCTED TO DO SO

## **Rules and Code of Conduct**

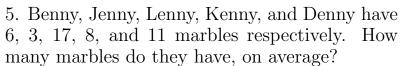
- This exam consists of 20 short-answer questions. Please write your answer legibly in the designated boxes. If your grader is unable to determine the answer you wrote, you may lose points. Please write your digits 0 9 in the boxes below in the boxes below so that we can reasonably judge your handwriting in the case of doubt.
- The difficulty of questions increases roughly as the test progresses.
- You will have 15 minutes to complete this exam. Once the exam begins, there will be no pauses in your time.
- No aids of any type are permitted for this exam other than the resources provided to you.
- An ample amount of scratch paper will be provided if you need more during the examination. Please raise your hand and remain seated. A proctor will bring you the extra paper.
- If you have any other questions at this time, please raise your hand. We will begin shortly. We wish you all good luck!

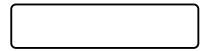
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1. Benny bought 3 packs of stickers, each with $x$ stickers. He already has 7 stickers. If he now has 25 stickers, solve for $x$ .	
2. Benny is simplifying his candy collection: $5(2x-3)-4(x+1)$ . What does he get in terms of $x$ ?	
3. Benny is drawing a triangle with base 8 cm and height 5 cm. In cm <sup>2</sup> , what is the area of his triangle?	$ m cm^2$
4. Solve for $y: 2y - 3 = 7$ .	





mph

7. Factor 
$$x^2 + 2x + 1$$
 completely.

8. If Benny's favorite rectangle has a perimeter of 24 cm and a length of 7 cm, what is its area?	cm
9. Write 0.625625 as a fraction in simplest form.	
10. Benny needs to solve for $x$ : $x^2 = 289$ . Please help him do so:	
11. A bag of Benny's favorite chips contains 8 red, 15 blue, and 17 green chips. What is the probability he picks a red chip first?	
12. Benny is in a hotel in Paris and doesn't know what temperature to put the AC at. Convert 70°F to Celsius using $C = \frac{5}{9}(F - 32)$ .	$^{\circ}\mathrm{C}$
13. Benny has an allowance of \$2. If he spends 12.5% of his money on a candy bar, how much, in cents did the candy cost?	cents
14. The sum of Benny's favorite two consecutive integers is 89. What is their product?	

15. Solve for x: 5(x-2) = 3x + 4.

16. Benny buys pencils in packs of 6. He needs 48 pencils. How many packs does he need?

packs

17. Write the first 4 multiples of 23.

18. The angles of a triangle in Benny's newest drawing are in the ratio 2:3:4. What is the smallest angle?

0

19. A circle has a radius of 7 cm. What is its circumference? (Use  $\pi \approx 3.14$ .)

cm

20. Benny buys 3 notebooks and 2 pens for \$14. If a notebook is \$3, how much is each pen?

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