

ISEE Lower Level Mathematics Practice Test

30 questions | 30 minutes | Four choices per question

Directions. Work through this original mathematics section in the allotted time. Choose one answer for each question. Use scratch paper. Check the answer key only after finishing. This is independent practice, not an official ISEE test or a score predictor. The full ISEE also tests reading; Lower, Middle, and Upper have additional verbal, quantitative, and essay sections.

Name: _____

Date: _____

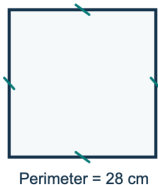
1. Four students read 6, 8, 10, and 12 books. What is the mean number of books read?

- A. 8
B. 10
C. 36
D. 9

2. A movie begins at 1:35 p.m. and lasts 1 hour 45 minutes. When does it end?

- A. 3:10 p.m.
B. 2:20 p.m.
C. 3:20 p.m.
D. 3:45 p.m.

3. A square has perimeter 28 cm. What is its area?



- A. 7 cm^2
B. 49 cm^2
C. 196 cm^2
D. 28 cm^2

4. A number is tripled and then increased by 7 to give 31. What is the number?

- A. 12
B. 8
C. 24
D. 6

5. A library has 248 books on its shelves. It buys 75 more and lends out 39. How many books are on its shelves now?

- A. 323
B. 212
C. 284
D. 362

6. A ribbon is $\frac{3}{4}$ meter long. Maria cuts off $\frac{1}{8}$ meter. How much remains?

- A. $\frac{2}{4}$ meter
B. $\frac{5}{8}$ meter
C. $\frac{4}{12}$ meter
D. $\frac{7}{8}$ meter

7. What is the value of 6 in 4,638?

- A. 600
B. 60
C. 6000
D. 6

8. Which expression represents 5 fewer than twice n ?

- A. $2(n - 5)$
B. $5 - 2n$
C. $2n - 5$
D. $n/2 - 5$

9. Each bottle shown holds 750 milliliters. How many milliliters do 3 bottles hold?

Bottle A: 750 mL
Bottle B: 750 mL
Bottle C: 750 mL

- A. 2500
B. 2250
C. 753
D. 1750

10. The table shows votes for three clubs. How many more votes did Art receive than Music?

Club	Votes
Art	14
Music	9
Chess	11

- A. 14
B. 23
C. 9
D. 5

11. In the diagram, a 2 cm by 5 cm strip is cut from one end of an 8 cm by 5 cm rectangle. What area remains?

Original rectangle: 8 cm by 5 cm
Cut-off strip: 2 cm by 5 cm
Find remaining area

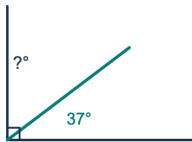
- A. 30 cm^2
B. 26 cm^2
C. 40 cm^2
D. 10 cm^2

12. The sale sign shown applies to a \$40 backpack. What is the sale price?

Backpack price: \$40
Sale sign: 15% off

- A. \$46
C. \$25
B. \$6
D. \$34

13. A right angle is split into two angles. One is 37° . What is the other?



- A. 143°
C. 53°
B. 47°
D. 90°

14. Use the tile counts shown. What is the probability of drawing a red tile?

Tile color | Count
Green | 4
Red | 3
Yellow | 5

- A. $1/4$
C. $3/4$
B. $1/3$
D. $3/5$

15. Use the school inventory shown. How many usable desks does the school have?

Classrooms: 7
Desks in each classroom: 24
Broken desks: 19

- A. 187
C. 168
B. 159
D. 149

16. A garden is 6 meters long and 4 meters wide. How much fencing is needed to go once around it?

- A. 20 meters
C. 10 meters
B. 24 meters
D. 48 meters

17. The pattern is 4, 9, 14, 19, What is the eighth term?

- A. 39
C. 40
B. 44
D. 34

18. A recipe uses 0.75 cup of milk for one batch. How many cups are needed for 4 batches?

- A. 1.75 cups
C. 2.8 cups
B. 3 cups
D. 30 cups

19. Which number is divisible by both 3 and 4?

- A. 27
C. 38
B. 36
D. 32

20. Two pieces of string measure 1.25 m and 0.8 m. What is their total length?

- A. 2.05 m
C. 12.05 m
B. 1.33 m
D. 1.95 m

21. The coordinate grid shows a rectangle with vertices (1,1), (6,1), (6,4), and (1,4). What is its perimeter?

Coordinate rectangle
(1,1) to (6,1): length 5
(6,1) to (6,4): width 3

- A. 30
C. 16
B. 15
D. 8

22. Which fraction is equal to 0.6?

- A. $5/6$
C. $2/3$
B. $3/5$
D. $6/100$

23. The temperatures for five days are 60, 64, 63, 68, and 65°F . What is the median?

- A. 68°F
C. 64°F
B. 65°F
D. 63°F

24. The receipt shown has 4 identical notebooks and one folder. What is the cost of one notebook?

Receipt
4 notebooks: same price each
1 folder: \$5
Total: \$37

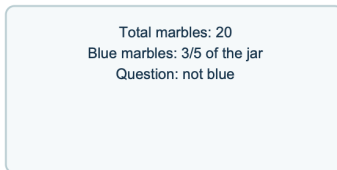
- A. \$8
C. \$9.25
B. \$10.50
D. \$32

25. The spinner has 8 equal sectors: 3 blue, 2 red, and 3 green. Which color is least likely?



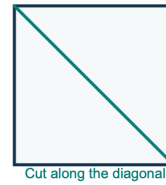
- A. all equally likely
- B. green
- C. blue
- D. red

26. The jar shown holds 20 marbles. If $\frac{3}{5}$ are blue, how many are not blue?



- A. 12
- B. 17
- C. 8
- D. 15

27. A square is cut along one diagonal. What kind of triangle is each resulting piece?



- A. scalene
- B. obtuse isosceles
- C. equilateral
- D. right isosceles

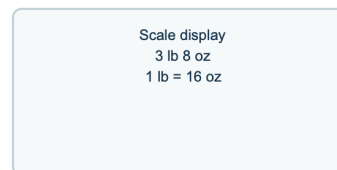
28. Tickets cost \$6 each plus one \$4 service fee per order. Which expression gives the cost of t tickets?

- A. $4t + 6$
- B. $10t$
- C. $6t + 4$
- D. $6(t + 4)$

29. A number rounds to 500 to the nearest hundred. Which number could it be?

- A. 547
- B. 550
- C. 601
- D. 449

30. The scale display shows 3 pounds 8 ounces. How many ounces is that? (1 pound = 16 ounces)



- A. 24 ounces
- B. 68 ounces
- C. 48 ounces
- D. 56 ounces

Answer key and explanations

1. **D — 9** The total is 36; divide by 4 students to get 9.
2. **C — 3:20 p.m.** After one hour it is 2:35; 45 more minutes makes 3:20 p.m.
3. **B — 49 cm²** Each side is $28 \div 4 = 7$ cm; area is $7 \times 7 = 49$ cm².
4. **B — 8** Subtract 7 from 31 to get 24, then divide by 3: 8.
5. **C — 284** $248 + 75 = 323$; $323 - 39 = 284$ books remain on the shelves.
6. **B — 5/8 meter** Write $3/4$ as $6/8$; $6/8 - 1/8 = 5/8$ meter.
7. **A — 600** The 6 is in the hundreds place, so its value is 600.
8. **C — 2n - 5** Twice n is $2n$; 5 fewer means subtract 5.
9. **B — 2250** $3 \times 750 = 2,250$ milliliters.
10. **D — 5** Art received 14 votes and Music received 9; $14 - 9 = 5$.
11. **A — 30 cm²** Original area is 40 cm²; removed area is 10 cm²; 30 cm² remains.
12. **D — \$34** 15% of \$40 is \$6, so the sale price is \$40 - \$6 = \$34.
13. **C — 53°** A right angle measures 90°, and $90 - 37 = 53^\circ$.
14. **A — 1/4** There are 12 tiles total; $3/12 = 1/4$ are red.
15. **D — 149** Seven classrooms have $7 \times 24 = 168$ desks; $168 - 19 = 149$ are usable.
16. **A — 20 meters** The perimeter is $2(6 + 4) = 20$ meters.
17. **A — 39** The pattern increases by 5. The eighth term is $4 + 7 \times 5 = 39$.
18. **B — 3 cups** Multiply $0.75 \times 4 = 3$ cups.
19. **B — 36** 36 is divisible by 3 (digit sum 9) and by 4 (last two digits 36).
20. **A — 2.05 m** Align decimal places: $1.25 + 0.80 = 2.05$ m.
21. **C — 16** Its side lengths are 5 and 3; perimeter = $2(5 + 3) = 16$.
22. **B — 3/5** $0.6 = 6/10 = 3/5$.
23. **C — 64°F** In order they are 60, 63, 64, 65, 68; the middle is 64°F.
24. **A — \$8** The notebooks cost $\$37 - \$5 = \$32$ in all; one costs $\$32 \div 4 = \8 .
25. **D — red** Red appears in only 2 of the 8 sectors; blue and green each appear in 3.
26. **C — 8** Blue marbles: $3/5 \times 20 = 12$; not blue: $20 - 12 = 8$.
27. **D — right isosceles** The square's corner gives a 90° angle, and the two adjoining sides are equal.
28. **C — 6t + 4** The tickets cost \$6t, and the single fee adds \$4.
29. **A — 547** Every whole number from 450 through 549 rounds to 500; 547 is in that range.
30. **D — 56 ounces** $3 \times 16 + 8 = 56$ ounces.