AlphaMath Olympiad (IMO)

Chapter 8: Money - Worksheet

PART 1: IDENTIFYING COINS AND NOTES

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SECTION A: MULTIPLE CHOICE QUESTIONS (Q1 - Q20)

CHOOSE THE CORRECT OPTION:

1. Which symbol represents the Indian Rupee?

   - [x] (A) ₹
   - [ ] (B) $
   - [ ] (C) £
   - [ ] (D) €

2. Sam has one ₹10 note and one ₹5 coin in his pocket. What is the total value of his money?



   - [x] (A) ₹15
   - [ ] (B) ₹12
   - [ ] (C) ₹20
   - [ ] (D) ₹10

3. What is the color of a modern ₹10 currency note in India?

   - [x] (A) Chocolate Brown
   - [ ] (B) Bright Pink
   - [ ] (C) Dark Blue
   - [ ] (D) Deep Red

4. Meghna has three ₹5 coins in her purse. How much money does she have in total?



   - [x] (A) ₹15
   - [ ] (B) ₹10
   - [ ] (C) ₹20
   - [ ] (D) ₹8

5. Which international currency uses the symbol $?

   - [x] (A) US Dollar
   - [ ] (B) British Pound
   - [ ] (C) European Euro
   - [ ] (D) Japanese Yen

6. A toy whistle costs ₹8. Which group of coins matches the price tag exactly?

   - [x] (A) One ₹5 coin and three ₹1 coins
   - [ ] (B) Two ₹5 coins
   - [ ] (C) Four ₹1 coins
   - [ ] (D) One ₹5 coin and one ₹2 coin

7. What is the color of a modern Indian ₹20 note?

- (A) Greenish Yellow
- (B) Sky Blue
- (C) Dark Black
- (D) Pure Purple

8. Pouch X has two ₹10 notes. Pouch Y has three ₹5 coins. Which pouch has more money?



- (A) Pouch X
- (B) Pouch Y
- (C) Both have the same money
- (D) Cannot be determined

9. How many ₹5 coins make the same value as one ₹20 note?

- (A) 4
- (B) 2
- (C) 5
- (D) 3

10. Arrange these toy prices from cheapest to costliest: Whistle (₹5), Ball (₹12), Yo-yo (₹8).

- (A) Whistle (₹5) → Yo-yo (₹8) → Ball (₹12)
- (B) Ball (₹12) → Yo-yo (₹8) → Whistle (₹5)
- (C) Yo-yo (₹8) → Whistle (₹5) → Ball (₹12)
- (D) Whistle (₹5) → Ball (₹12) → Yo-yo (₹8)

11. Which coin has a shiny golden outer ring and a silver center (bimetallic coin)?

- (A) ₹10 coin
- (B) ₹1 coin
- (C) ₹2 coin
- (D) ₹5 coin

12. Aman has four ₹2 coins. Ritu has one ₹10 note. Who has more money and by how much?

- (A) Ritu has more by ₹2
- (B) Aman has more by ₹2
- (C) Both have the same
- (D) Ritu has more by ₹5$

ASSERTION & REASONING (A&R) TYPE:

13. Read the two statements below and choose the correct option:

Assertion (A):	One ₹20 note has the exact same value as two ₹10 notes.
Reason (R):	Adding 10 + 10 equals 20.

- (A) Both (A) and (R) are true and (R) is the correct explanation of (A).
- (B) Both (A) and (R) are true but (R) is NOT the correct explanation of (A).
- (C) (A) is true but (R) is false.
- (D) (A) is false but (R) is true.

14. Read the two statements below and choose the correct option:

Assertion (A): A pouch containing five ₹1 coins has more value than a pouch containing one ₹10 coin.

Reason (R): Five coins are greater in number of coins than one coin.

- (A) Both (A) and (R) are true and (R) is the correct explanation of (A).
- (B) Both (A) and (R) are true but (R) is NOT the correct explanation of (A).
- (C) (A) is true but (R) is false.
- (D) (A) is false but (R) is true. ●

15. Read the two statements below and choose the correct option:

Assertion (A): The symbol £ is used for the British Pound currency.

Reason (R): Different countries have their own unique currency symbols.

- (A) Both (A) and (R) are true and (R) is the correct explanation of (A). ●
- (B) Both (A) and (R) are true but (R) is NOT the correct explanation of (A).
- (C) (A) is true but (R) is false.
- (D) (A) is false but (R) is true.

MATCH THE COLUMN (THREE STATEMENTS):

16. Match the currency notes in Column I with their equal coin combinations in Column II:

Column I	Column II
(P) One ₹10 note	(1) Four ₹5 coins
(Q) One ₹20 note	(2) Five ₹1 coins
(R) One ₹5 coin	(3) Two ₹5 coins

- (A) P → 3, Q → 1, R → 2 ●
- (B) P → 1, Q → 3, R → 2
- (C) P → 2, Q → 1, R → 3
- (D) P → 3, Q → 2, R → 1

17. Sam has two ₹10 notes. He buys a toy truck for ₹12. How much money does he have left in his pocket?

- (A) ₹8 ●
- (B) ₹10
- (C) ₹6
- (D) ₹5

18. Match the country/currency in Column I with its correct symbol in Column II:

Column I	Column II
(P) Indian Rupee	(1) $
(Q) US Dollar	(2) €
(R) European Euro	(3) ₹

- (A) P → 3, Q → 1, R → 2 ●
- (B) P → 1, Q → 2, R → 3
- (C) P → 2, Q → 3, R → 1
- (D) P → 3, Q → 2, R → 1

TRUE OR FALSE (THREE STATEMENTS):

19. Identify whether each statement about currency is True (T) or False (F):

Column I	Column II
(P) Three ₹5 coins add up to ₹15.	(1) True
(Q) Two ₹2 coins have greater value than one ₹5 coin.	(2) False
(R) A ₹50 note has more value than two ₹20 notes.	(3) True

- (A) P → True, Q → False, R → True
- (B) P → True, Q → True, R → False
- (C) P → False, Q → False, R → True
- (D) P → True, Q → False, R → False

20. Identify whether each statement about price tags is True (T) or False (F):

Column I	Column II
(P) A toy costing ₹18 is cheaper than a toy costing ₹12.	(1) False
(Q) You can pay ₹6 using exactly three ₹2 coins.	(2) True
(R) ₹10 is greater than ₹8.	(3) True

- (A) P → False, Q → True, R → True
- (B) P → True, Q → True, R → False
- (C) P → False, Q → False, R → True
- (D) P → True, Q → False, R → True

SECTION B: GUIDED PRACTICE QUESTIONS (Q21 - Q25)

SOLVE WITH GUIDED STEP-BY-STEP HINTS:

21. Aman has one ₹10 note and one ₹2 coin in his pocket. What is the total value of his money?

GUIDED STEPS

Step 1: Write down the value of the paper note: ₹ 10 .
Step 2: Write down the value of the coin: ₹ 2 .
Step 3: Add the note and the coin: 10 + 2 = ₹ 12 .
Conclusion: Aman has ₹ 12 in total.

22. **Ritu has one ₹20 note and one ₹5 coin. What is the total value of her money?**

GUIDED STEPS

Step 1: Note value is ₹ 20 and coin value is ₹ 5 .
Step 2: Add the two amounts: 20 + 5 = ₹ 25 .
Conclusion: Ritu has ₹ 25 in total.

23. **How many brown ₹10 notes make the same value as four ₹5 coins combined?**

GUIDED STEPS

Step 1: Calculate the total value of four ₹5 coins: 5 + 5 + 5 + 5 = ₹ 20 .
Step 2: Count how many ₹10 notes are needed to reach that sum: 10 + 10 = ₹ 20 .
Conclusion: 2 brown ₹10 notes are needed.

24. **Which group of coins makes exactly ₹9: Group A (one ₹5 coin and two ₹2 coins) or Group B (four ₹2 coins)?**

GUIDED STEPS

Step 1: Calculate total for Group A: 5 + 2 + 2 = ₹ 9 .
Step 2: Calculate total for Group B: 2 + 2 + 2 + 2 = ₹ 8 .
Step 3: Compare both totals to the target price of ₹9.
Conclusion: Group A makes exactly ₹9.

25. **Sort these toy prices from highest to lowest: Yo-yo (₹8), Toy Car (₹20), Ball (₹12). Which toy is the cheapest?**

GUIDED STEPS

Step 1: Compare the three numbers: 20, 12, 8.
Step 2: Arrange from highest to lowest: _____ (₹20) → _____ (₹12) → _____ (₹8).
Step 3: Identify the toy with the smallest price tag.
Conclusion: The cheapest toy is the Yo-yo

SECTION C: DO IT YOURSELF (Q26 - Q30)

SHOW YOUR WORKING AND CALCULATE:

26. Sam has three ₹2 coins and one ₹5 coin. What is the total money in his pouch?

SHOW YOUR WORKING

calculate three 2 rupees coins=2+2+2=6
one 5 rupees coin
6+5=11 sam has total 11rupees

27. Meghna has two ₹10 notes and one ₹5 coin. She wants to buy a doll costing ₹22. Does she have enough money?

SHOW YOUR WORKING

two 10 note = 10+10=20
one 5 rupees coin =5
20+5=25 yes she have enough money to buy a doll

28. How many ₹2 coins are needed to make a total value of ₹10?

SHOW YOUR WORKING

we need five 2 rupees coins to make 10 rupees

29. A cap costs ₹15 and a badge costs ₹5. Find the total cost of buying both items.

SHOW YOUR WORKING

cap cost 15 rupees
badge costs 5 rupees
total 20 rupees costs of buying both item

30. Group A has two ₹5 coins. Group B has three ₹2 coins. Which group has more value and by how much?

SHOW YOUR WORKING

5+5=10
2+2+2=6
group A has more value

SECTION D: BRAIN TEASER CHALLENGE (Q31 - Q33)

OLYMPIAD HIGHER ORDER THINKING SKILLS:

31. Aman has 4 coins in his pocket. All of them are the same type of coin. If his total money is ₹20, what is the value of each coin?

SHOW YOUR WORKING

5+5+5+5=20
the value of each coin has 5

32. Ritu wants to buy a toy airplane costing ₹18. She only has ₹5 coins and ₹1 coins. What is the smallest total number of coins she can use to pay exactly ₹18?

SHOW YOUR WORKING

33. Four toys are on a shop shelf: Robot (₹25), Car (₹15), Book (₹10), Balloon (₹5). If Meghna buys the costliest toy and the cheapest toy, what is her total bill?

SHOW YOUR WORKING

costliest toy cost is 25 rupees
cheapest toy cost is 5 rupees
25+5=30 her total bill is 30 rupees