



Name: _____

Date: _____

EduCHAMPS
Methods

10 Challenging GEP Test Questions

Q1) There are 48 units of family in a particular HDB block. 22 families ordered Chinese newspapers and 30 families ordered English newspapers. 4 families did not order newspapers at all. How many families ordered both Chinese and English newspapers? _____ [2]

Q2) 3 oranges cost as much as 4 apples and 1 pear. 4 pears cost as much as 6 oranges. How many apples cost as much as 1 pear? _____ [2]

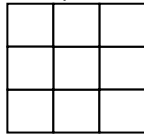
Q3) How many squares (various sizes) are there in pattern 5? _____ [2]



Pattern 1
(1 square)



Pattern 2
(5 squares)



Pattern 3
(14 squares)

Q4) I have 2 numbers. These 2 numbers are between 1 and 20. When I multiply them, the result is 153, but when I add them up, I get 26. What is the difference between the 2 numbers? _____ [2]

Q5) Zachary used 4 sticks to make a square and 5 sticks to make a pentagon. In total, he used 60 sticks to make 3 more pentagons than squares. How many pentagons did he make? _____ [2]

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Q6) Doctor Lam gave Henry 30 tablets and told him to take 2 tablets 3 times a day. How many days will Henry take to finish all the tablets? _____[2]

Q7) Paul had 270 stamps. He gave $\frac{4}{9}$ of the stamps to Ali and some stamps to Leela. He had 60 stamps left. What fraction of the stamps did he give to Leela? _____[2]

Q8) Jack had a total of 20 oranges and pears. If he exchanges every pear for 2 oranges, he will have 28 oranges. How many oranges does he have at first? _____[2]

Q9) 4 people, Abel, Ben, Carl and Dennis, shared a sum of money. Abel's share was half of Ben's share. Carl's share was equal to the sum of Abel's and Ben's shares. Dennis's share was 4 times of Abel's share. If Dennis's share was \$724, what was the original sum of money that was shared by 4 people? _____[2]

Q10) There are altogether 45 balls in the three boxes A, B, and C. 7 balls are first transferred from box A to box B. 3 balls are then transferred from box B to box C. Finally, 6 balls are transferred from box C to box A. There are then equal number of balls in each box. Find the number of balls in box A at first. _____[2]



Answers For 10 Challenging GEP Test Questions with EduCHAMPS Methods:

Q1) 8

Venn Diagram Method:

$$48 - 4 = 44$$

$$30 + 22 = 52$$

$$52 - 44 = \underline{8}.$$

Q2) 4 apples

Alphabet Method:

$$3R \rightarrow 4A + 1P$$

$$6R \rightarrow 8A + 2P$$

$$4P \rightarrow 6R$$

$$4P \rightarrow 8A + 2P$$

$$4P - 2P \rightarrow 8A$$

$$2P \rightarrow 8A$$

$$1P \rightarrow 4A \text{ (4 apples)}.$$

Q3) 55

Square Number Method:

$$1 + 4 + 9 + 16 + 25 = \underline{55}.$$

Q4) 8

Guess and Check:

$$17 - 9 = \underline{8}.$$

Q5) 8

Getting Rid of the Extra:

$$5 \times 3 = 15$$

$$60 - 15 = 45$$

$$4u + 5u = 9u$$

$$45 \div 9 = 5$$

$$5 + 3 = \underline{8}.$$

Q6) 5

Tree Planting Method:

$$3 \times 2 = 6$$

$$30 \div 6 = \underline{5}.$$

Q7) $\frac{1}{3}$

Part Whole Fraction:

$$1 - \frac{4}{9} = \frac{5}{9}$$

$$270 \times \frac{5}{9} = 150$$

$$150 - 60 = 90$$

$$\frac{90}{270} = \frac{1}{3}.$$



Q8) 12

Exchange Method:

$$28 - 20 = 8$$

$$20 - 8 = \underline{12}.$$

Q9) \$1810

Unit Method:

$$A = u, B = 2u, C = 3u, D = 4u$$

$$\$724 \div 4 = \$181$$

$$u + 2u + 3u + 4u = 10u$$

$$\$181 \times 10 = \underline{\$1810}.$$

Q10) 16

Working Backwards:

$$45 \div 3 = 15$$

$$15 + 6 = 21 \text{ (C)}$$

$$15 - 6 = 9 \text{ (A)}$$

$$21 - 3 = 18 \text{ (C)}$$

$$15 + 3 = 18 \text{ (B)}$$

$$18 - 7 = 11 \text{ (B)}$$

$$9 + 7 = \underline{16} \text{ (A)}.$$