BROAD HORIZON
TUITION

11+ Basics Tuition

Year 4

Week 10

ANSWERS

Starter Task

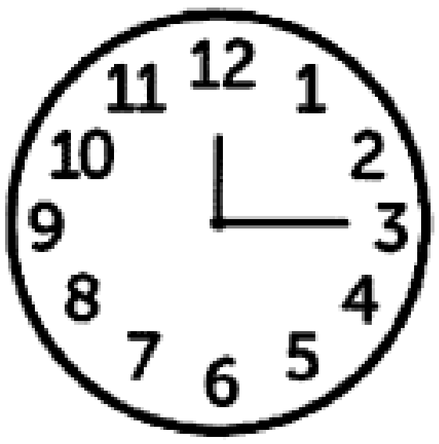
Paper 9	Answer
1. What is half of 10?	*5*
2. What is half of 18?	*9*
3. What is one tenth of 20?	*2*
4. What is one tenth of 50?	*5*
5. A bar of chocolate has been divided into 10 equal parts. What fraction is one part?	*1/10*
6. A pizza has been cut into 4 equal slices. What fraction is one slice?	*1/4*
7. What number is half way between 1 and 2?	*1½*
8. What number is half way between 5 and 6?	*5½*
9. What is a quarter of 8 chocolates?	*2*
10. What is a quarter of 12p?	*3p*
Comment:	

Paper 10	Answer
1. What is half of 20?	*10*
2. What is half of 16?	*8*
3. What is one tenth of 30?	*3*
4. What is one tenth of 60?	*6*
5. A cake has been cut into 10 equal slices. What fraction is one slice?	*1/10*
6. A grapefruit has been cut into 2 equal pieces. What fraction is one piece?	*1/2*
7. What number is half way between 3 and 4?	*3½*
8. What number is half way between 7 and 8?	*7½*
9. What is a quarter of 4 apples?	*1*
10. What is a quarter of 16p?	*4*
Comment:	

Mental Maths

1. 63
2. 65
3. 56
4. 8
5. 90
6. 62
7. 200
8. 54
9. 82
10. 77
11. 30
12. 57
13. 53
14. 84
15. 18

Time



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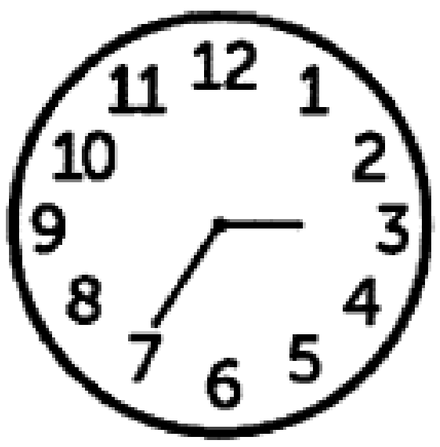

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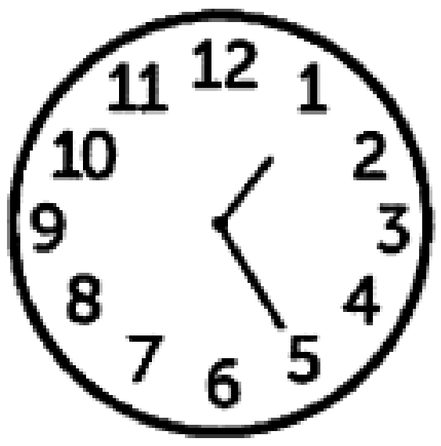

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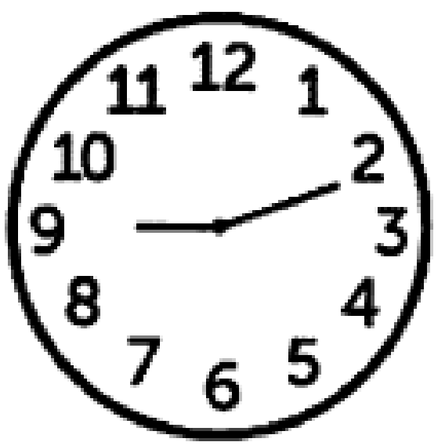

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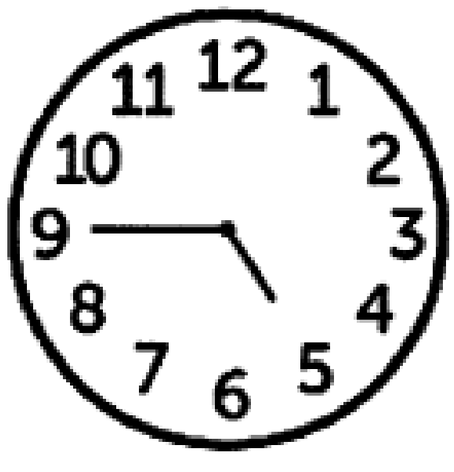

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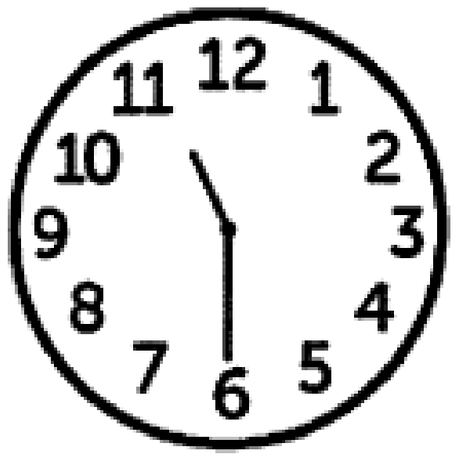

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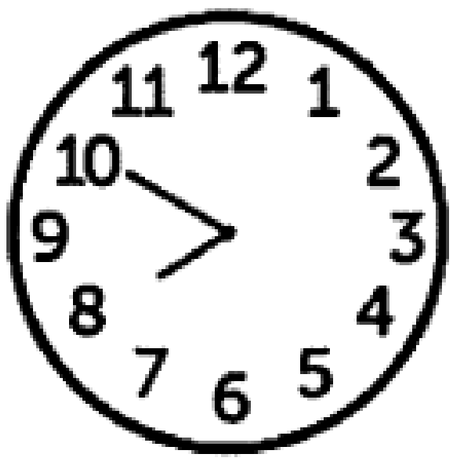

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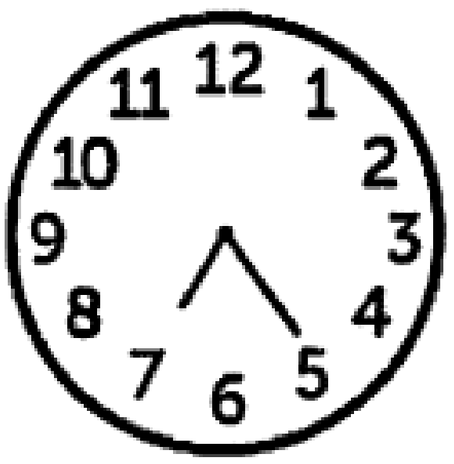

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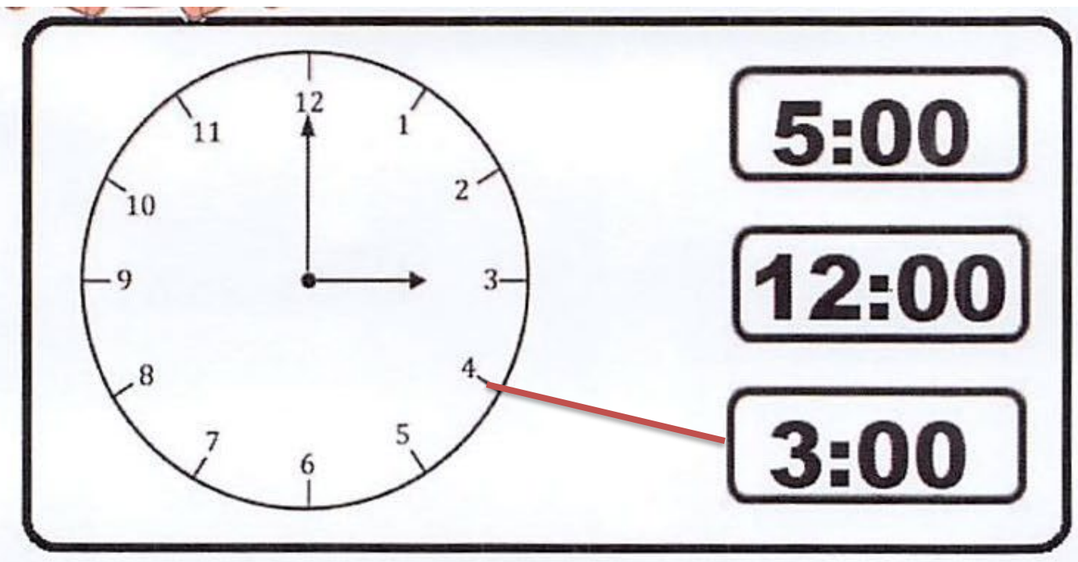
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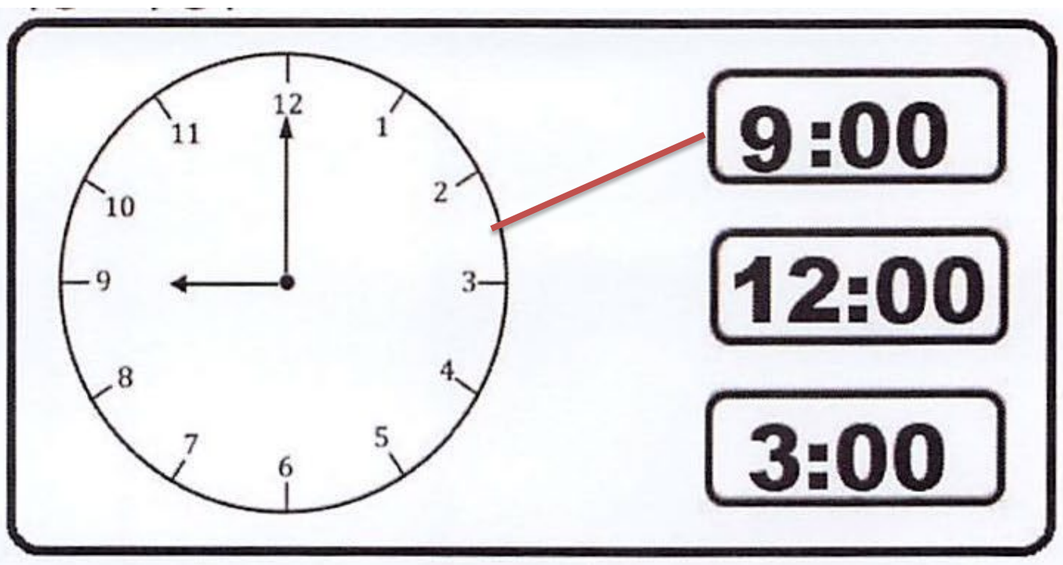
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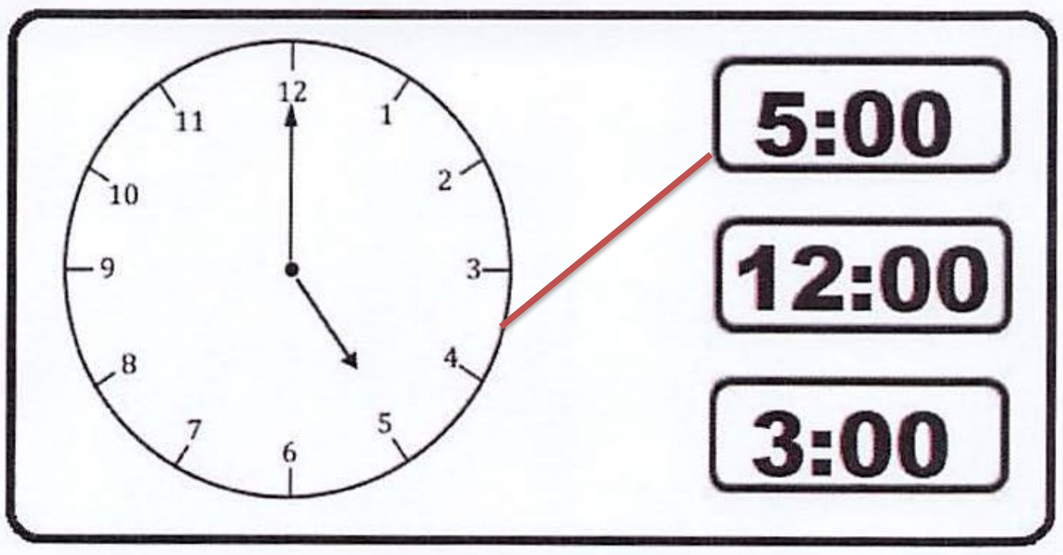
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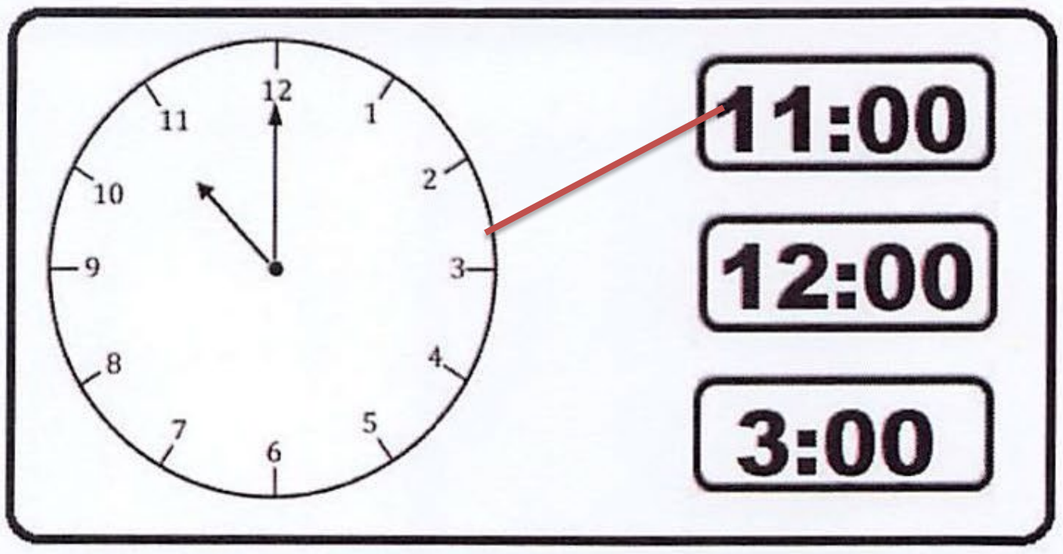
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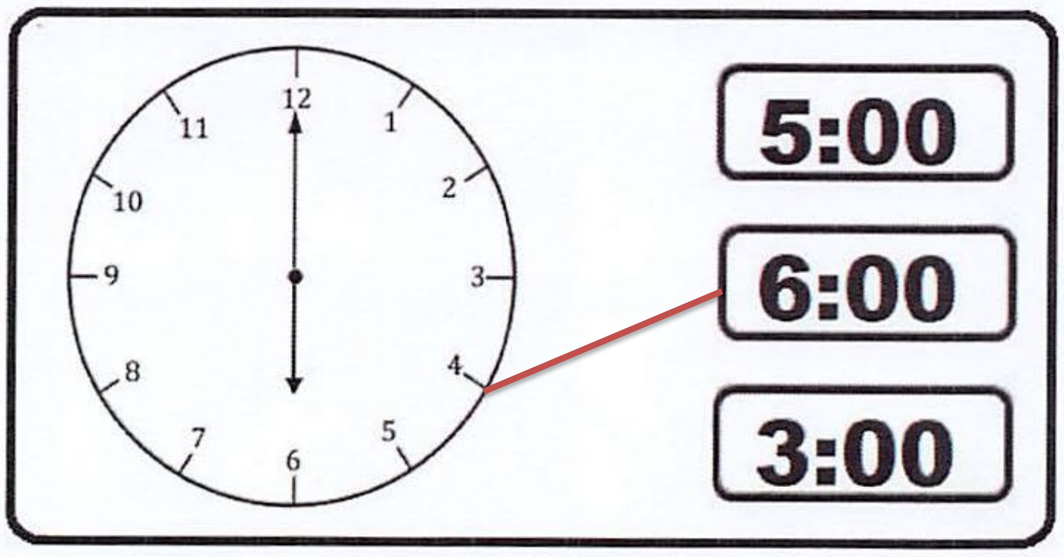
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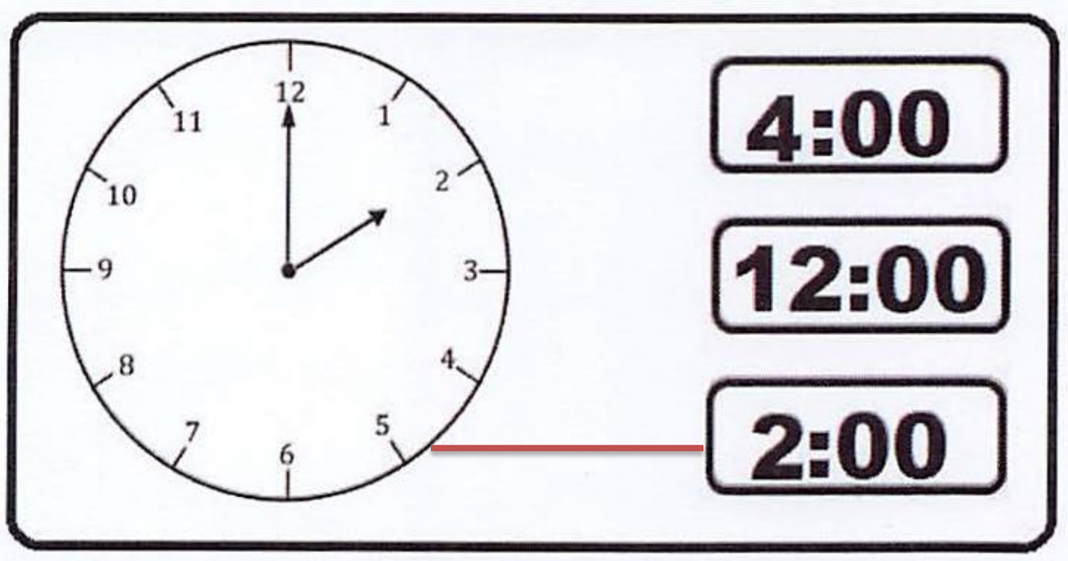
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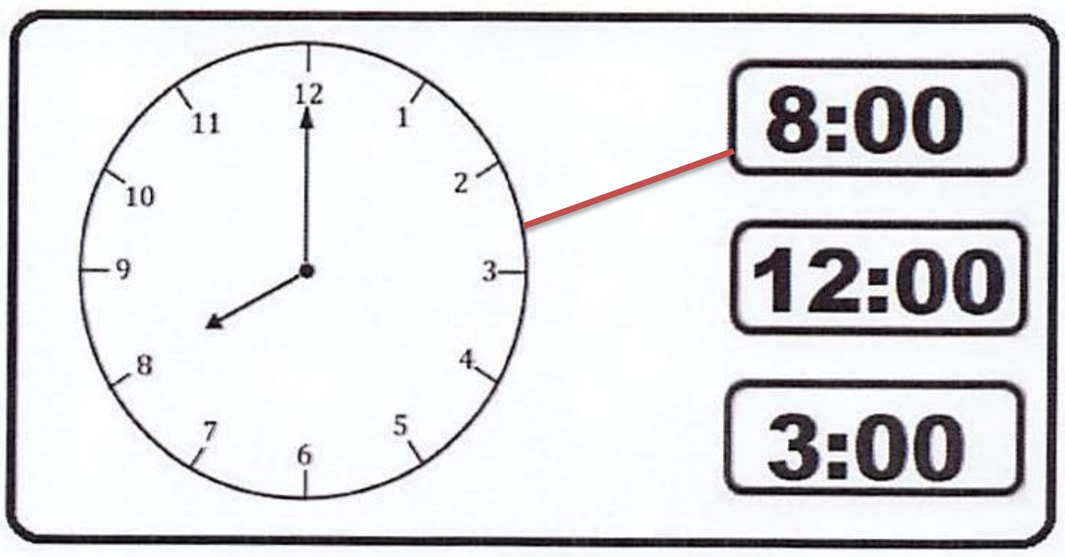
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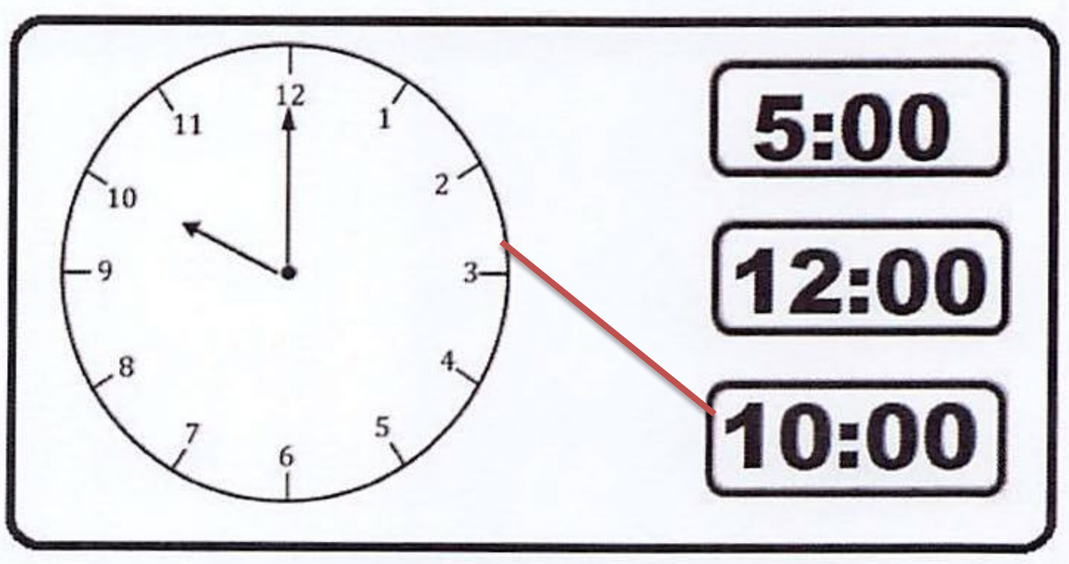
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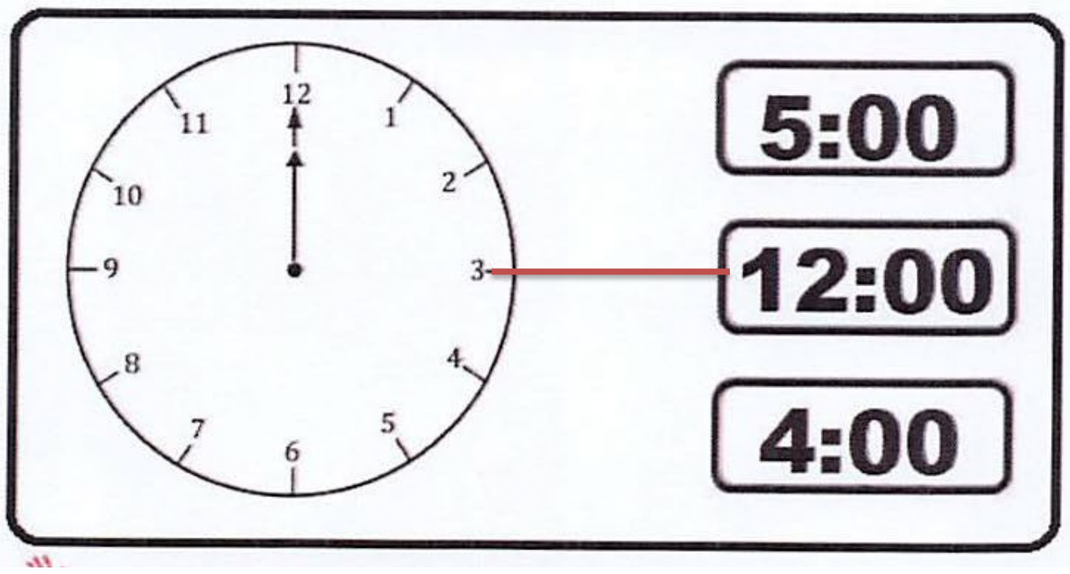
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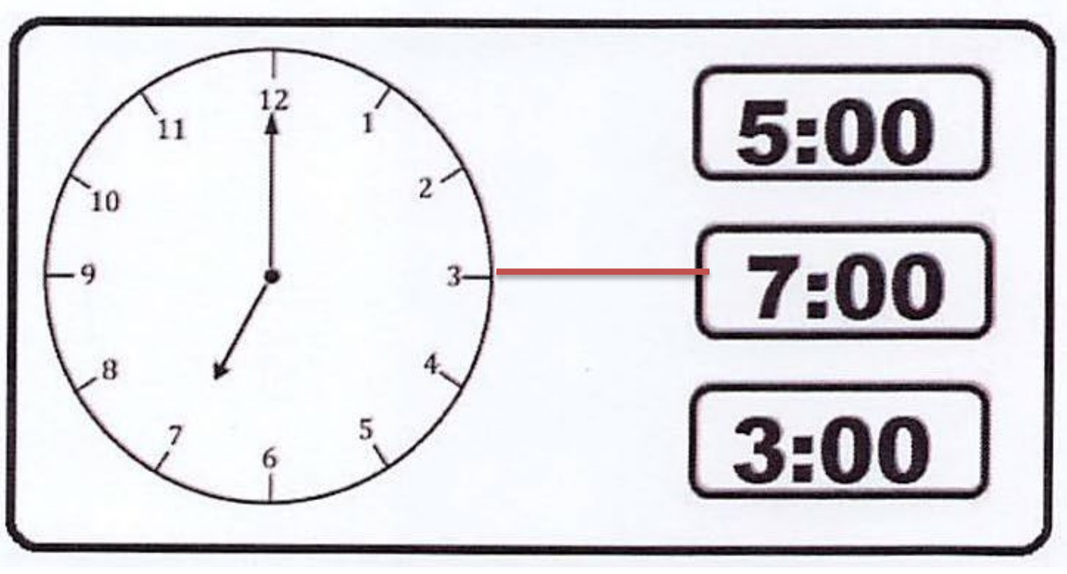
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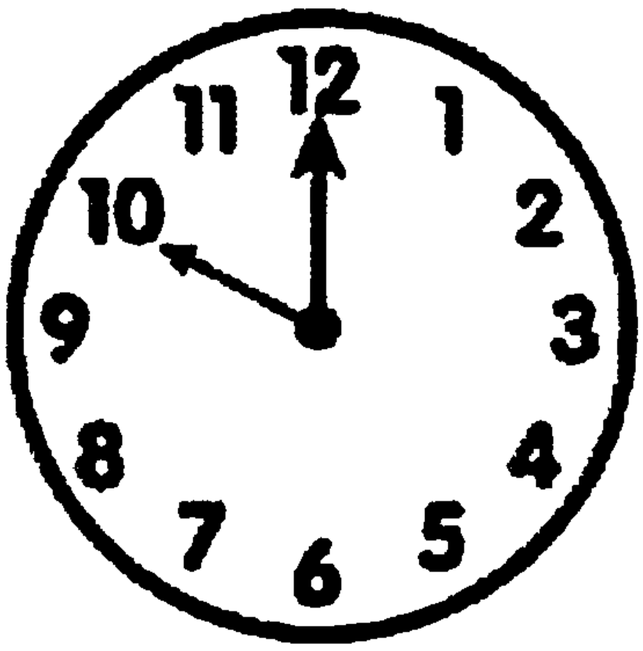

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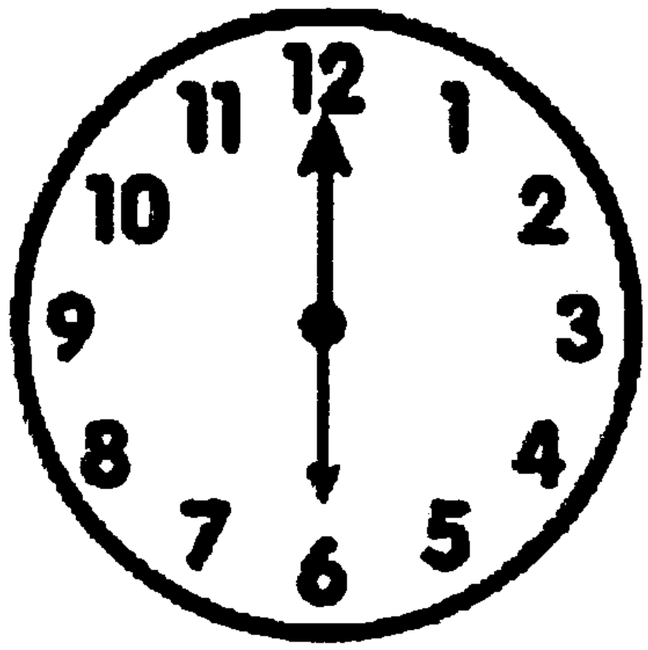

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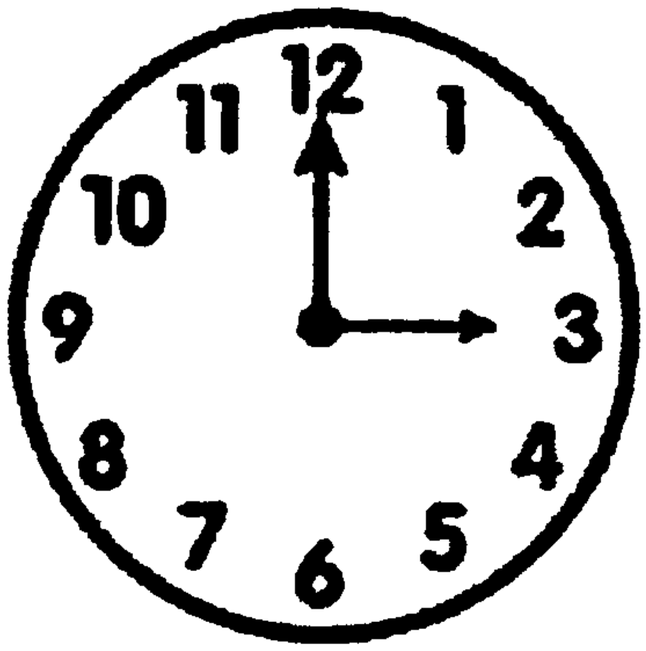

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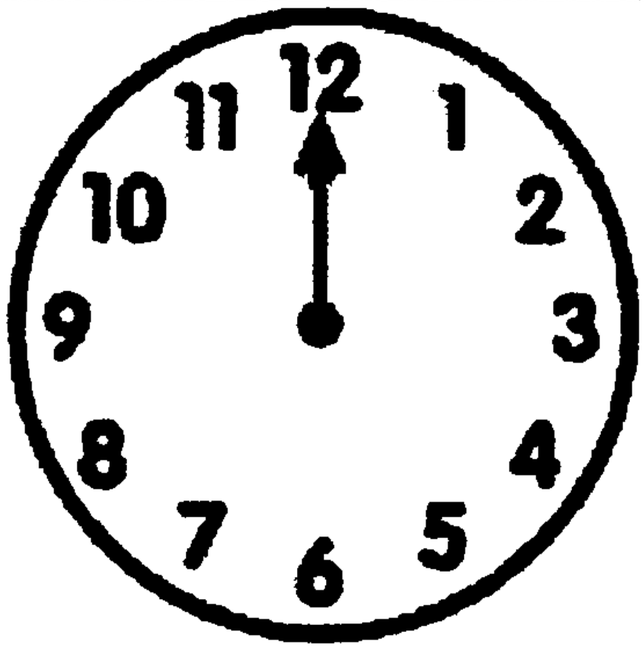

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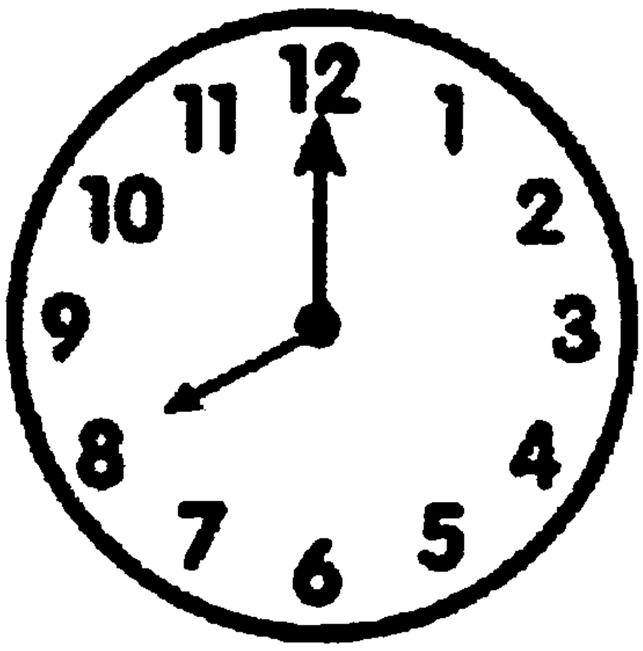

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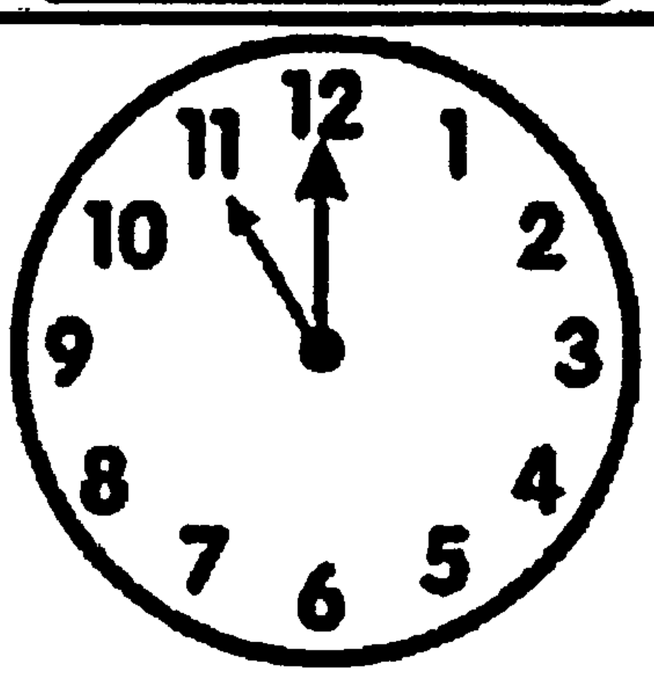

11:00

Adding Fractions with Same Denominators

MATH MONKS

Answers

① $\frac{1}{3} + \frac{1}{3} = \frac{2}{3}$

② $\frac{2}{4} + \frac{1}{4} = \frac{3}{4}$

③ $\frac{2}{5} + \frac{2}{5} = \frac{4}{5}$

④ $\frac{4}{12} + \frac{6}{12} = \frac{10}{12} = \frac{5}{6}$

⑤ $\frac{3}{8} + \frac{5}{8} = \frac{8}{8} = 1$

⑥ $\frac{4}{14} + \frac{3}{14} = \frac{7}{14} = \frac{1}{2}$

⑦ $\frac{4}{6} + \frac{1}{6} = \frac{5}{6}$

⑧ $\frac{3}{9} + \frac{3}{9} = \frac{6}{9} = \frac{2}{3}$

⑨ $\frac{3}{10} + \frac{3}{10} = \frac{6}{10} = \frac{3}{5}$

⑩ $\frac{6}{11} + \frac{1}{11} = \frac{7}{11}$

Name : _____

Score : _____ Date : _____

MATH MONKS

Adding Fractions - Unlike Denominators

Answers

① $\frac{1}{4}+\frac{1}{2}$ $=\frac{3}{4}$	② $\frac{3}{4}+\frac{3}{8}$ $=1\frac{1}{8}$	③ $\frac{2}{4}+\frac{5}{6}$ $=1\frac{1}{3}$
④ $\frac{3}{6}+\frac{1}{3}$ $=\frac{5}{6}$	⑤ $\frac{8}{3}+\frac{4}{5}$ $=3\frac{7}{15}$	⑥ $\frac{2}{5}+\frac{5}{10}$ $=\frac{9}{10}$
⑦ $\frac{2}{3}+\frac{1}{2}$ $=1\frac{1}{6}$	⑧ $\frac{4}{6}+\frac{5}{8}$ $=1\frac{7}{24}$	⑨ $\frac{3}{9}+\frac{1}{3}$ $=\frac{2}{3}$
⑩ $\frac{6}{4}+\frac{5}{12}$ $=1\frac{11}{12}$	⑪ $\frac{4}{6}+\frac{2}{9}$ $=\frac{8}{9}$	⑫ $\frac{9}{2}+\frac{2}{8}$ $=4\frac{3}{4}$

Adding Fractions

MATH MONKS

Answers

1 $\frac{3}{7} + \frac{2}{7}$

$= \frac{5}{7}$

2 $\frac{1}{6} + \frac{4}{8}$

$= \frac{2}{3}$

3 $\frac{3}{9} + \frac{1}{6}$

$= \frac{1}{2}$

4 $\frac{8}{10} + \frac{1}{10}$

$= \frac{9}{10}$

5 $\frac{1}{4} + \frac{2}{4}$

$= \frac{3}{4}$

6 $\frac{3}{6} + \frac{3}{9}$

$= \frac{5}{6}$

7 $\frac{1}{5} + \frac{4}{6}$

$= \frac{13}{15}$

8 $\frac{2}{3} + \frac{4}{3}$

$= 2$

9 $\frac{7}{8} + \frac{2}{4}$

$= 1\frac{3}{8}$

10 $\frac{4}{3} + \frac{1}{3}$

$= 1\frac{2}{3}$

11 $\frac{4}{8} + \frac{2}{8}$

$= \frac{3}{4}$

12 $\frac{1}{9} + \frac{4}{9}$

$= \frac{5}{9}$

13 $\frac{2}{3} + \frac{3}{9}$

$= 1$

14 $\frac{2}{10} + \frac{7}{10}$

$= \frac{9}{10}$

15 $\frac{3}{4} + \frac{2}{5}$

$= 1\frac{3}{20}$

Subtracting Fractions – Same Denominator

1) $\frac{5}{10} - \frac{4}{10} = \frac{1}{10}$

2) $\frac{5}{12} - \frac{2}{12} = \frac{3}{12}$

3) $\frac{2}{3} - \frac{1}{3} = \frac{1}{3}$

4) $\frac{2}{8} - \frac{1}{8} = \frac{1}{8}$

5) $\frac{2}{4} - \frac{1}{4} = \frac{1}{4}$

6) $\frac{5}{7} - \frac{4}{7} = \frac{1}{7}$

7) $\frac{2}{6} - \frac{1}{6} = \frac{1}{6}$

8) $\frac{7}{10} - \frac{4}{10} = \frac{3}{10}$

9) $\frac{4}{5} - \frac{2}{5} = \frac{2}{5}$

10) $\frac{11}{12} - \frac{5}{12} = \frac{6}{12}$

11) $\frac{4}{12} - \frac{3}{12} = \frac{1}{12}$

12) $\frac{10}{11} - \frac{4}{11} = \frac{6}{11}$

13) $\frac{8}{9} - \frac{1}{9} = \frac{7}{9}$

14) $\frac{3}{11} - \frac{2}{11} = \frac{1}{11}$

15) $\frac{4}{9} - \frac{2}{9} = \frac{2}{9}$

Subtracting Fractions- Different Denominator

1) $\frac{2}{5} - \frac{1}{3} = \frac{6}{15} - \frac{5}{15} = \frac{1}{15}$

2) $\frac{1}{2} - \frac{1}{3} = \frac{3}{6} - \frac{2}{6} = \frac{1}{6}$

3) $\frac{2}{4} - \frac{1}{5} = \frac{10}{20} - \frac{4}{20} = \frac{6}{20} = \frac{3}{10}$

4) $\frac{1}{2} - \frac{1}{5} = \frac{5}{10} - \frac{2}{10} = \frac{3}{10}$

5) $\frac{2}{3} - \frac{1}{2} = \frac{4}{6} - \frac{3}{6} = \frac{1}{6}$

6) $\frac{4}{5} - \frac{1}{4} = \frac{16}{20} - \frac{5}{20} = \frac{11}{20}$

7) $\frac{2}{3} - \frac{1}{2} = \frac{4}{6} - \frac{3}{6} = \frac{1}{6}$

8) $\frac{1}{2} - \frac{2}{4} = \frac{2}{4} - \frac{2}{4} = 0$

9) $\frac{3}{4} - \frac{1}{10} = \frac{15}{20} - \frac{2}{20} = \frac{13}{20}$

10) $\frac{4}{5} - \frac{3}{4} = \frac{16}{20} - \frac{15}{20} = \frac{1}{20}$

11) $\frac{2}{3} - \frac{1}{2} = \frac{4}{6} - \frac{3}{6} = \frac{1}{6}$

12) $\frac{2}{3} - \frac{1}{5} = \frac{10}{15} - \frac{3}{15} = \frac{7}{15}$

13) $\frac{2}{4} - \frac{2}{5} = \frac{10}{20} - \frac{8}{20} = \frac{2}{20} = \frac{1}{10}$

14) $\frac{2}{4} - \frac{1}{2} = \frac{2}{4} - \frac{2}{4} = 0$

15) $\frac{5}{10} - \frac{1}{4} = \frac{10}{20} - \frac{5}{20} = \frac{5}{20} = \frac{1}{4}$

Times Tables

1) 36	2)45	3)90
4)36	5) 56	6)80
7)64	8)32	9)48
10)44	11)60	12)25
13)14	14)20	15)25
16)32	17)99	18)90
19)8	20)54	21)33
22)16	23)16	24)40
25)60	26)22	27)60
28)40	29)45	30)60
31)1	32)9	33)21
34)8	35)24	36)44
37)18	38)70	39)60
40) 22	41) 10	42) 10
43)50	44)22	45)14

Paper 1

1 Europe
2 butterflies
3 timber
4 It shields the forest against soil erosion from heavy rain.
5 (1) emergent layer (2) canopy (3) understory (4) shrub layer (5) forest floor
6 *easily broken, delicate*
7 *moved on*
8–9 Two of the following: *the soil becomes barren/goes back to desert; species become extinct; tribal people are displaced; it helps to cause global warming.*

10 book
11 desk
12 Wednesday
13 legs
14 house
15 Hannah
16 paper
17 young
18 country
19 trouble
20 touch
21 double
22 First
23 Then
24 While
25 After

26–31 bellow, arrow, puppet, sparrow, wobble, pillow

32–40 **M**r **S**cott visited **E**dinburgh and **G**lasgow each **F**riday. **T**hen he travelled on the overnight train to **L**ondon.

Vocabulary

3. Antonyms

1. correct, 2. ignore, 3. worst, 4. conclude, 5. deny, 6. merge,
7. vertical, 8. filthy, 9. repair, 10. object

5. Synonyms

1. messy, 2. award, 3. interval, 4. level, 5. intelligent,
6. enthusiastic, 7. swallow, 8. consider, 9. tint, 10. desire

Non Verbal Reasoning

Test 3 — pages 16-19

1. C

In all figures, the stars have different shadings.

2. A

In all figures, the drop in the middle is black.

3. E

In all figures, the white circle is split by solid lines into parts of equal size. There is a black circle in the middle of the figure.

4. B

All figures must have a shape inside a square at the top, and a reflection of the same shape inside a circle on the bottom.

5. B

In option A, the black circle is in the wrong place. Option C is a 90 degree anticlockwise rotation. In option D, the figure is the wrong shape.

6. D

Option A has one black square missing. Option B has black circles. In option C, the black squares have moved in front of the arrow.

7. D

In option A, the line with the black circle is in the wrong place. In option B, the grey shading inside the large white shape is in the wrong place. Option C is a reflection and a 45 degree clockwise rotation.

8. C

Option A is a 90 degree rotation. In option B, the lines inside the white shape are in the wrong place. Option D has not been reflected.