

Y6 – Autumn – Block 2 – Step 14 – Mental calculations Answers

Question	Answer
1	a) 92 b) added 5 c) $25 + 48 = 73$ $250 + 480 = 730$ $62 + 55 = 117$ $620 + 550 = 1,170$ $260 + 250 + 240 = 750$
2	Whitney add $20 + 30 + 40$ and then subtracts 3. $19 = 20 - 1$, $29 = 30 - 1$ and $39 = 40 - 1$, so $19 + 29 + 39 = 20 + 30 + 40 - 1 - 1 - 1$ Amir does a column addition, exchanging 20 ones for 2 tens. Children need to justify the method they think is more efficient, e.g.: Whitney's method involves simple additions. Amir's method does not involve changing any of the numbers.
3	a) 128p b) 495 cm c) £4.01 d) 1,402 ml
4	a) multiple possible answers, e.g.: $750 - 200 = 550$ $550 - 30 = 520$ so $750 - 230 = 520$ b) multiple possible answers, e.g.: $750 - 300 = 450$ $450 + 20 = 470$ so $750 - 280 = 470$ c) $89 - 35 = 54$ $890 - 350 = 540$ $80 - 25 = 55$ $800 - 250 = 550$ $82 - 45 = 37$ $820 - 450 = 370$
5	a) £92,249 b) £42,250
6	a) $10 \times 8 = 80$ c) $18 \times 5 = 90$ $20 \times 8 = 160$ $34 \times 5 = 170$ $40 \times 8 = 320$ $5 \times 430 = 2,150$ b) $18 \times 10 = 180$ d) $21 \times 6 = 126$ $18 \times 20 = 360$ $7 \times 32 = 224$ $18 \times 200 = 3,600$ $336 = 84 \times 4$ Children may have used different methods. They need to be able to explain why their method works.
7	a) 190 b) 460 c) 2,700 d) 34,000