|  | Question 1 | Question 2 | Question 3 | Question 4 |
| :--- | :---: | :---: | :---: | :---: |
| A | $y=\frac{1}{2} x+3$ | Lines 3 and 4 | $y=\frac{2}{5} x+3$ <br> See graph below | $y=-2 x-5$ |
| B | $y=-2 x-5$ | $y=-\frac{1}{3} x-2$ | Lines 1 and 2 | $y=-\frac{3}{4} x+3$ <br> See graph below |
| C | $y=-\frac{1}{2} x+4$ | $y=3 x+2$ | $y=-4 x-\frac{7}{2}$ | Lines 1 and 4 |
| See graph below |  | $y=\frac{4}{5} x-2$ <br> Dee graph below | $y=2 x+4$ | $y=-x+2$ |
| Lines 2 and 3 |  |  |  |  |



|  | Question 5 | Question 6 | Question 7 | Question 8 |
| :---: | :---: | :---: | :---: | :---: |
| A | Given: $m=0.75, b=\$ 3$ <br> Equation: $y=0.75 x+3$ <br> 16 miles | Given: rate of $x=\$ 2$, rate of $y=\$ 1.50$ <br> Equation: $2 x+1.5 y=30$ <br> 9 pounds | $\begin{aligned} & \text { Given: }(1,3.5),(4,8) \\ & \frac{\text { Equations: } y-8=1.5(x-4)}{\text { or } y-3.5=1.5(x-1)} \\ & \$ 18.50 \end{aligned}$ | $\begin{aligned} & \text { Given: } m=40,(6,275) \\ & \text { Equation: } y-275=40(x-6) \\ & \$ 35 \end{aligned}$ |
| B | Given: $(15,25.5) ; m=1.5$ <br> Equation: $y-25.5=1.5(x-15)$ \$3 | Given: $b=\$ 50, m=25$ <br> Equation: $y=25 x+50$ <br> 4.5 hours | Given: rate of $x=\$ 20$, rate of $y=\$ 5$ <br> Equation: $20 x+5 y=100$ <br> 8 treats | $\begin{aligned} & \text { Given: }(10,11),(15,8) \\ & \text { Equations: } y-11=-\frac{3}{5}(x-10) \\ & \quad \text { or } y-8=-\frac{3}{5}(x-15) \\ & 13.4 \mathrm{~km} \end{aligned}$ |
| C | ```Given: \((1,35),(3,57)\) Equations: \(y-35=11(x-1)\) or \(y-57=11(x-3)\) 79 participants``` | $\begin{aligned} & \text { Given: } m=18,(2,81) \\ & \text { Equation: } y-81=18(x-2) \\ & \$ 45 \end{aligned}$ | Given: $b=5 \mathrm{~cm}, m=1.5$ <br> Equation: $y=1.5 x+5$ 8 days | Given: rate of $x=2$ pts, rate of $y=4 \mathrm{pts}$ <br> Equation: $2 x+4 y=100$ <br> 2 questions |
| D | Given: rate of $x=\$ 4$, rate of $y=\$ 6$ <br> Equation: $4 x+6 y=48$ <br> 6 pounds | $\begin{aligned} & \text { Given: }(5,93),(3,57) \\ & \frac{\text { Equations: } y-57=18(x-3)}{\quad \text { or } y-93=18(x-5)} \\ & \$ 75 \quad \end{aligned}$ | $\begin{aligned} & \text { Given: } m=33,(6,228) \\ & \text { Equation: } y-228=33(x-6) \\ & \$ 30 \end{aligned}$ | Given: $b=\$ 6, m=3.25$ <br> Equation: $y=3.25 x+6$ <br> About 5.5 hours |

