p. 511: 29-34, 41, 42, 45

(29) $\langle 16.31, 7.61 \rangle$ (30) $\langle 8.03, 11.47 \rangle$ (31) $\langle -14.52, 44.70 \rangle$
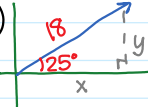
(32) $\langle -23.72, 22.92 \rangle$ (33) $|v|=5, \theta=53.13°$ (34) $|v|=\sqrt{5}, \theta=116.57°$
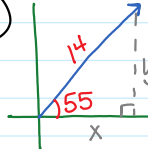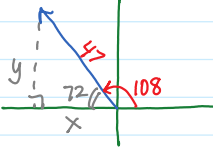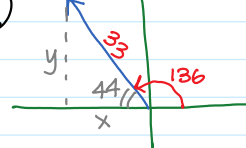
(41) $\langle -223.99, 480.34 \rangle$ (42) $\langle 79.88, -453.01 \rangle$ (45) $\langle 3.42, 9.40 \rangle$
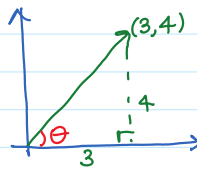
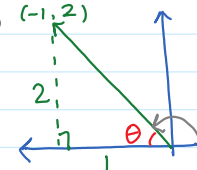㉙

$\sin 25° = \dfrac{y}{18} \Rightarrow y = 7.61$

$\cos 15° = \dfrac{x}{18} \Rightarrow x = 16.31$

$<16.31, 7.61>$

㉚
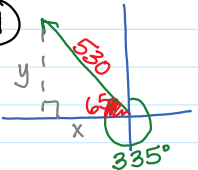
$\sin 55 = \dfrac{y}{14} \Rightarrow y = 11.47$

$\cos 55 = \dfrac{x}{14} \Rightarrow x = 8.03$
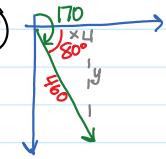
$<8.03, 11.47>$

㉛

$\sin 72 = \dfrac{y}{47} \Rightarrow y = 44.70$

$\cos 72 = \dfrac{x}{47} \Rightarrow x = -14.52$
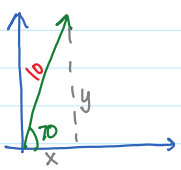
$<-14.52, 44.70>$

㉜

$\sin 44 = \dfrac{y}{33} \Rightarrow y = 22.92$

$\cos 44 = \dfrac{x}{33} \Rightarrow x = 23.74$

$<-23.74, 22.92>$

㉝

$|v| = \sqrt{3^2 + 4^2}$

$|v| = \sqrt{25}$

$|v| = 5$

$\tan \theta = \dfrac{4}{3}$

$\theta = 53.13°$

㉞

$|v| = \sqrt{(-1)^2 + 2^2}$

$|v| = \sqrt{5}$

$\tan \theta = \dfrac{2}{1}$

$\theta = 63.43$

$180 - 63.43$

$116.57°$

㊶

$\sin 65 = \dfrac{y}{530} \Rightarrow y = 480.34$

$\cos 65 = \dfrac{x}{530} \Rightarrow x = 223.99$

$335°$

$<-223.99, 480.34>$

㊷

$\sin 80 = \dfrac{y}{460} \Rightarrow y = 453.01$

$\cos 80 = \dfrac{x}{460} \Rightarrow x = 79.88$

$<79.88, -453.01>$

㊺

$\sin 70 = \dfrac{y}{10} \Rightarrow y = 9.40$

$\cos 70 = \dfrac{x}{10} \Rightarrow x = 3.42$

$<3.42, 9.40>$