



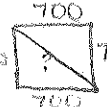


<p>1</p> <p>B</p> $\sin I = \sin L$	<p>2</p> <p>A</p> $\sin 64^\circ$	<p>Name: <u>Hirsch</u></p> <p>Period: _____ Date: _____</p>	
<p>3</p> $\frac{4}{9}$	<p>4</p>  $\tan 30 = \frac{10}{d}$ $d = \frac{10}{\tan 30}$ $d = 17.321 \text{ ft}$	<p>5</p> $60^2 + b^2 = 100^2$ $3600 + b^2 = 10,000$ $b^2 = 6400$ $b = 80$ $\frac{x}{2}$ 160 ft	<p>6</p>  $\sin 22 = \frac{x}{35}$ $x = 35 \sin 22$ $x = 13.111 \text{ ft}$
<p>7</p>  $\sin T = \frac{16}{20}$ $16^2 + x^2 = 20^2$ $256 + x^2 = 400$ $x^2 = 144$ $x = 12$ $\frac{12}{20} = \frac{3}{5}$	<p>8</p> <p>D</p> $\cos 35^\circ$	<p>9</p> $\tan 29 = \frac{x}{130}$ $x = 130 \tan 29$ $x = 72.060 \text{ ft}$	<p>10</p> $\tan 34 = \frac{x}{50}$ $x = 50 \tan 34$ $x = 33.725 \text{ m}$
<p>11</p> $\tan 36 = \frac{x}{140}$ $x = 140 \tan 36$ $x = 101.716 \text{ ft}$	<p>12</p> <p>B</p> $\frac{p}{q}$	<p>13</p> $12^2 + b^2 = 19^2$ $144 + b^2 = 361$ $b^2 = 217$ $b = 14.731$ $\tan F = \frac{b}{12} = \frac{14.731}{12}$	<p>14</p> $\sin 19.5 = \frac{7000}{x}$ $x = \frac{7000}{\sin 19.5}$ $x = 20,970.210 \text{ ft}$
<p>15</p> $\tan 12 = \frac{x}{350}$ $x = 350 \tan 12$ $x = 74.395 \text{ ft}$	<p>16</p>  $8^2 + 8^2 = c^2$ $64 + 64 = c^2$ $128 = c^2$ $c = 8\sqrt{2}$ <p>or could use 45-45-90 rules</p>	<p>17</p>  $700^2 + 700^2 = x^2$ $490000 + 490000 = x^2$ $980000 = x^2$ $x = 700\sqrt{2} \text{ or } 989.949 \text{ ft}$	<p>18</p> $\sin(x - A) = \cos A$ $x = 90^\circ$ <p>C</p>
<p>19</p> $\cos A = \frac{5}{12}$ $\cos D = \frac{20}{52} = \frac{5}{13}$	<p>20</p> $7^2 + b^2 = 16^2$ $49 + b^2 = 256$ $b^2 = 207$ $b = 3\sqrt{23}$ $= 14.387$ $AC = 28.774$	<p>21</p> $\sin 46 = \frac{3}{x}$ $x = \frac{3}{\sin 46}$ $x = 4.170 \text{ m}$	<p>22</p> $\sin 44 = \frac{x}{75}$ $x = 75 \sin 44$ $x = 52.099 \text{ ft}$
<p>23</p> $\sin \theta = \frac{345}{1400}$ $\theta = \sin^{-1}\left(\frac{345}{1400}\right)$ $\theta = 14.266^\circ$	<p>24</p> $\tan C = \tan E$ <p>they are the same</p>	<p>25</p> $\tan \theta = \frac{115}{40}$ $\tan^{-1}\left(\frac{115}{40}\right) = \theta$ $\theta = 70.821^\circ$	