a) P Company

Gross profit 30,000/100,000 = 30%

Operating expenses 15,000/100,000 = 15%

Amortization expense 1,000/100,000 = 1%

Interest expense 400/100,000 = .4%

Income tax expense 1,000/100,000 = 1%

Net income 12,600/100,000 = 12.6%

Q Company

Gross profit 30,000/80,000 = 37.5%

Operating expenses 20,000/80,000 = 25%

Amortization expense 1,000/80,000 = 1.3%

Interest expense 500/80,000 = .6%

Income tax expense 2,000/80,000 = 2.5%

Net income 6,000/80,000 = 7.5%

b) P Company

Return on common shareholders' equity

12,600/[(40,000 +22,600 + 40,000 + 10,000)/2] = 22.4%

Q Company

Return on common shareholders' equity

6,000/[(1,000 +23,000 + 1,000 + 17,000)/2] = 28.6%

c) <u>P Company</u>

A/R turnover

100,000/(10,000+11,000)/2 = 9.5 times

Days sales in A/R = 365/9.5 = 38.4 days

<u>Q Company</u>

A/R turnover

80,000/(24,000+22,000)/2 = 3.5 times

Days sales in A/R = 365/3.5 = 104.3

P Company collects its receivables much faster

d) <u>P Company</u>

Current ratio (1,000 + 10,000 + 40,000)/30,000 = 1.7

Quick ratio (1,000 + 10,000)/30,000 = .4

<u>Q Company</u>

Current ratio (4,000 + 24,000 + 8,000)/4,000 = 9

Quick ratio (4,000 + 24,000)/4,000 = 7

Q Company's short-term liquidity is superior